DOCUMENT RESUME

ED 335 277 SO 021 432

AUTHOR	LaBonte, Karen
TITLE	The Social Studies Link to HIV Education. A Sourcebook for HIV/AIDS Education in the Social Studies Classroom, Grades 11-12.
INSTITUTION	Putnam and Northern Westchester Counties Board of Cooperative Educational Services, Yorkt[illegible] Heights, N.Y.
SPONS AGENCY	New York State Education Dept., Albany. Bureau of Health and Drug Education and Services.
PUB DATE	90
NOTE	179p.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Acquired Immune Deficiency Syndrome; *Citizenship Education; Civics; Economics; Grade 11; Grade 12; High Schools; *Learning Activities; Psychology; *Social Studies; Student Educational Objectives; Teaching Methods; United States History

ABSTRACT

This sourcebook was developed to present ideas on how to bring the discussion of the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) into the 11th and 12th grade social studies classroom, while continuing to focus on social studies concepts and skills. The manual's four main sections examine HIV and AIDS from the perspectives of U.S. history, economics, participation in government, and psychology. Each section contains background discussion material and suggestions for activities, which may be carried out either as class assignments or as extra credit projects. Each of the outlined activities includes an overview, teacher background, and follow-up assignments. Appendices include a student handout of what high school juniors and seniors need to know about HIV and AIDS, a synopsis for teachers of current information on HIV infection, an AIDS-myth fact sheet, a list of AIDS regional training centers, and lists of useful books and information sources. (DB)

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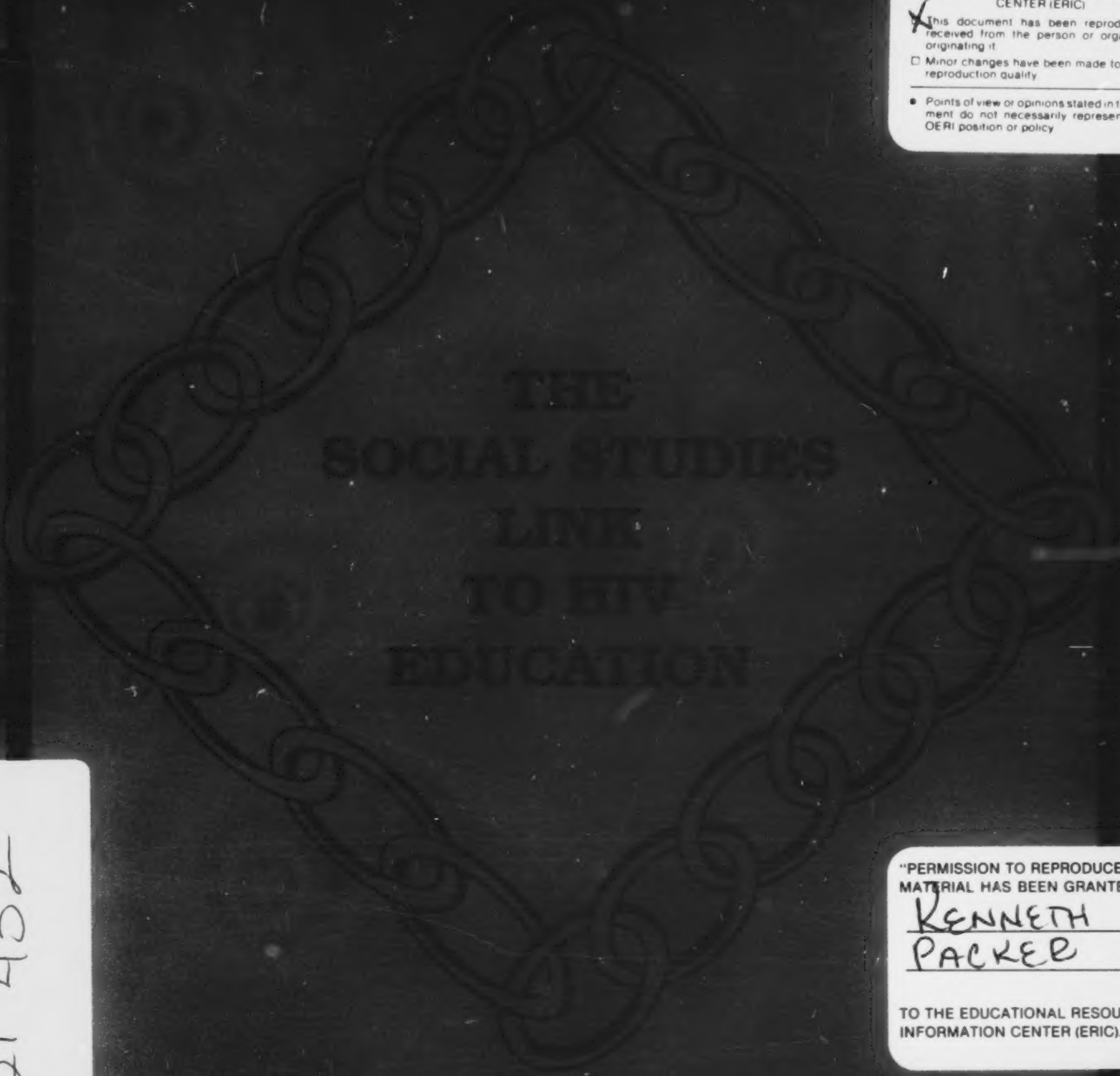

THE
SOCIAL STUDIES
LINK
TO HIV
EDUCATION

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SO 021 432

A Sourcebook for HIV/AIDS Education
In the Social Studies Classroom

Grades 11 - 12

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THE SOCIAL STUDIES LINK
A Sourcebook for HIV/AIDS Education in the Social Studies Classroom
Grades 11-12

Prepared by

THE REGIONAL HEALTH EDUCATION CENTER
Putnam/Northern Westchester BOCES

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in conjunction with

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This document was made possible by a grant from the New York State Education Department, Bureau of Health Education and Services, Albany, NY.

Acknowledgements

The Regional Health Education Center would like to thank the following individuals for their invaluable contributions to *The Social Studies Link*.

Norm Abromowitz, Social Studies Office, New York State Education Department
Kathy Bartlett, Department of Media and Publications, Burroughs Wellcome Company
George Hammersla, Participation in Government Teacher, Irondequiot High School, Rochester, New York
Dr. Terry Flaherty, Participation in Government Teacher, Pearl River High School, Pearl River, NY
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Anne Scitovsky, Chief, Health Economics Department, Research Institute, Palo Alto Medical Foundation
Valerie P. Setlow, PhD., National AIDS Program Office
Peter Staley and Pierre Giamatti, AIDS Coalition to Unleash Power

In addition, we would like to extend special thanks to John DiNatale, Ed.D., Director of Language Arts and Social Studies, Pearl River Public Schools, Pearl River, NY, for the extra time and effort he devoted to the project.

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Introduction

Citizenship in a Time of Crisis

It's hard to be a teenager in the twentieth century. The economic implications of the deficit, environmental disaster, drugs, divorce, suicide-- aspects of these issues confront many teenagers daily. Add to that list the day-to-day concerns of a junior or senior in high school, such as SATs, jobs, plans for the future, decisions about sexuality, identity etc., and it's not surprising to find that many young people have mixed feelings about the prospect of becoming adults.

Then, there's the continuing spread of HIV infection, one of the most frightening epidemics in the memory of the human race. With everything else on their minds, teenagers often don't want to see HIV/AIDS as something that relates to them. But it does. New studies indicate that the incidence of HIV infection in teenagers is rising dramatically-- a 40% increase between 1987 and 1989 alone (higher in New York State), and that this wave of the crisis is just beginning to make itself known.

In the face of these enormous challenges, the HIV/AIDS epidemic in particular, we are called to educate our young people to become good citizens. What does it mean to participate as a citizen in this time of crisis? In the best of all possible situations, it means developing the skills, attitudes and knowledge that facilitate effective and responsible decision-making on personal, community-wide, nationwide and global levels. Unfortunately, the easiest way for teenagers to deal with something as unpleasant as HIV infection or AIDS is to deny it. "I won't ever shoot drugs;" "I would never have sex with someone who has HIV infection;" "It won't happen to me;" "AIDS? It doesn't have anything to do with me. Let's change the subject."

But with continued opportunities to think and talk honestly about many aspects of HIV infection, our young people become more open. Their questions are hard and realistic, and although a tone of restrained fear often permeates the discussion, dual realizations sink in: AIDS is real and scary and it's not going away, but there are things every citizen can do about it. Because their young adult and adult lives will be touched by HIV/AIDS in some way, students must not only learn to cope with that reality, they must develop a way of life that minimizes their risk of contracting the disease.

Developing Lifestyles that Avoid the Risk of HIV Infection

With the appropriate information and education, HIV infection and disease is preventable. The New York State Education Department's goal is for students to develop lifestyles and behaviors that don't put them at risk for developing HIV infection. But healthy behaviors don't just happen, and they certainly don't just happen in one particular class or subject area. Before behaviors can be developed or changed, students must have more than a discussion of facts. They need repeated opportunities to explore aspects of many AIDS-related subjects. The more opportunities students have to explore concepts, attitudes and feelings about HIV/AIDS, and the more varied the modalities for this exploration, the more likely they are to integrate these into healthy, perhaps lifesaving, behaviors.

The Social Studies Link to HIV/AIDS Education

In New York State, students are required to receive basic information about HIV/AIDS in health education. In most districts, this course is taught in eighth and then again in tenth grade. The social studies classroom is a natural arena for the development and expression of concepts, attitudes, opinions, and beliefs the teenager will carry with them into adult citizenship; an opportunity to expand on the basic knowledge learned in health class. This kind of exploration in relationship to AIDS is crucial to a teenager's ability to develop healthy attitudes and behaviors.

The purpose of this Sourcebook is to present some ideas on how to bring the discussion of HIV/AIDS into the 11th and 12th grade social studies classroom, while continuing to focus on social studies concepts and skills.

About the Activities

- All the activities in this Sourcebook are keyed to objectives from the 1988 New York State Education Department Social Studies Syllabus (K-12).
- All the activity descriptions include an overview, objectives, teacher background, and follow-up assignments.
- All the activities may be done as class assignments. The activities may also be used as extra-credit projects or make-up assignments. Follow-up activities may be done as primary activities.
- The activity outlines are designed to be adapted to an individual teacher's needs or interests, and used across a range of academic ability levels and a variety of time periods. Individual teachers are encouraged to adapt the activities to their own specific scheduling needs.

Some Things to Consider

- Your own comfort level in discussing HIV infection and AIDS has to be a starting point. It's impossible to teach a class where the objective is for students to feel they can confront HIV/AIDS, if you feel afraid, unsure, or apathetic.
- Discussing HIV/AIDS also demands a class climate of tolerance for all views and especially compassion towards persons with HIV infection and AIDS. It's helpful to remind students that underneath most intolerance is fear.

- If you feel you don't know enough about HIV infection to bring it up, see the Appendices provided here for basic facts, including resources for obtaining more information.

- If you feel HIV education isn't your job, it's important to remember that the primary focus of each activity is on the development of social studies skills and concepts. HIV/AIDS just happens to be the subject of the assignments.

- If you feel you're too busy to add to what you must already cover in the classroom, try substituting a **Social Studies Link** activity for a concept you were going to cover or review anyway.

- "AIDS" is a word that is now part of everyday vocabulary. However, terminology changes; the use of the term "AIDS" is no longer always appropriate. There are also differences between the terms "HIV," "HIV infection" and "AIDS." These should not be used synonymously or interchangeably.

Their definitions are as follows:

HIV: The name of the organism Human Immunodeficiency Virus.

HIV infection: The state of being infected with HIV. Development of HIV antibodies is evidence of HIV infection. Also called HIV disease.

AIDS: Acquired Immune Syndrome, the clinical term that is the end stage of HIV infection.

This Sourcebook is based on these definitions. It also introduces "HIV infection" as terminology more appropriate than "AIDS" in most situations.

Please Note: New York State law mandates that parents have the right to withdraw their children from planned units of instruction about HIV/AIDS prevention. Because none of the activities in here deal specifically with how to prevent HIV infection, students would not need to be excused from these lessons.

Overview of Objectives

		SUBJECT			
		History	Economics	Government	Psych.
	ing and to create their own proposal and rationale for additonal spending.		X		
14.	For students to expand their understanding of the federal government as a producer and consumer of goods and services.		X		
15.	For students to develop the awareness that decisions concerning services provided by the government are ultimately decided by citizens (taxpayers), and to experience the process of economic decision making.		X		
16.	For students to develop skills in communication, information-gathering, and working as a group.		X	X	X
17.	For students to have the experience of interacting with adults from the community.			X	
18.	For students to participate in the process of public policy formation.			X	
19.	For students to recognize a number of public policy approaches to the HIV/AIDS epidemic, and their underlying moral, religious, and civil points of view.			X	
20.	For students to develop and defend a point of view not necessarily their own about a specific AIDS policy question.			X	
21.	For students to develop and express a personal point of view regarding one aspect of the AIDS crisis, and an understanding of the actions they as individuals can take to influence policy formation regarding AIDS.			X	
22.	For students to develop the skills of research, data analysis, working with others, and persuasive expression of issues, opinions and information.		X	X	X
23.	For students to experience and discuss the impact of stereotyping on their lives.				X
24.	For students to begin to understand that HIV infection and AIDS don't just happen to people who fit a particular stereotype, but can infect anyone who engages in high risk behaviors.				X
25.	For students to apply the observations they make about themselves and the impact of stereotyping, to persons with HIV/AIDS.				X

Overview of Objectives

		SUBJECT			
		History	**Economics**	**Government**	**Psych.**
1.	For students to expand their knowledge of and sensitivity to HIV infection, related social issues, and the impact of both on their lives.	X	X	X	X
2.	For students to experience the impact of the HIV/AIDS epidemic on Constitutional rights and civil liberties.	X			
3.	For students to apply their knowledge of enduring Constitutional issues to a specific situation in our society.	X			
4.	For students to integrate both their personal and intellectual responses to issues raised by the HIV epidemic into a broader understanding of the Constitution.	X			
5.	For students to examine the interaction of basic economic principles in a real-life situation: the question of supply and demand in the context of scarcity.		X		
6.	For students to expand their knowledge of and sensitivity to HIV infection and related social issues as part of a society's decision-making; i.e., opportunity costs, and government spending and allocations.		X		
7.	For students to evaluate available information and formulate an opinion about AZT pricing.		X		
8.	For students to examine the spending habits of the average consumer within the context of a yearly budget by fitting expenses to a salary.		X		
9.	For students to consider the economic impact of HIV disease on a consumer's income and economic decision-making potential.		X		
10.	For students to gain a broader understanding of HIV infection, including the community services or resources available to assist the HIV-infected individual in coping.		X	X	
11.	For students to develop skills in reading and interpreting charts and graphs.		X		
12.	For students to gain experience in making cost/benefit analyses.		X		
13.	For students to consider the different factors affecting allocations in state spend-		X		

		SUBJECT			
		History	Economics	Government	Psych.
26.	For students to become aware of the roles played by fear, hatred and self-protection in the formation of stereotypes.				X
27.	For sudents to explore and move beyond their own stereotypes of persons with AIDS, ideally to a more compassionate perspective.				X
28.	For students to look at HIV prevention from the perspective of social and/or personality development.				X
29.	For students to gain knowledge and understanding of Maslow's hierarchy of needs.				X
30.	For students to apply information about Maslow's theory to the HIV/AIDS epidemic and their own behaviors.				X
31.	For students to apply their knowledge of psychological development to real-life situations.				X
32.	For students to identify behaviors which put individuals at high risk for HIV infection, and think of alternatives.				X
33.	For students to receive an experiential introduction to Kohlberg's theory of moral development.				X
34.	For students to develop the ability to think critically and decide on their own point of view.			X	X
35.	For students to participate in a class discussion about an HIV-related moral dilemma.				X

American History

American History

Civil Liberties and HIV Infection - Question I.

Introduction

The Constitution of the United States of America guarantees individual civil liberties that shall not be abridged or denied by any form of organized government. The Constitution is, however, open to interpretation, as are the parameters of the rights guaranteed therein. The severity of the HIV epidemic sweeping our country is causing many individuals, from politicians and legislators to private citizens, to examine certain Constitutional issues in a new light.

Overview of the Lesson

Through discussion and participation in a demonstration activity, students explore the constitutional implications of the question "Should the state require individuals infected with HIV to furnish the identities of his or her contacts (sexual and/or needle sharing) who also might have become infected?"

Objectives

1. For students to expand their awareness of HIV infection and its impact on their lives.
2. For students to experience the impact of the HIV epidemic on Constitutional rights and civil liberties.
3. For students to apply their knowledge of enduring Constitutional issues to a specific situation in our society.
4. For students to integrate both their personal and intellectual response issues raised by the HIV epidemic into a broader understanding of the Constitution.

Teacher Background

I. General Information

> "Generally, contact tracing means a program in which the state requires individuals infected with a disease... to furnish the identities of his or her contacts who might have also become infected. The state in turn notifies these contacts that they may have been exposed to an infectious disease and should be tested. For diseases other than [HIV infection and] AIDS, the follow up also involves treatment. Although the terms are often used synonymously, "contact tracing" can be distinguished from "partner notification," which involves a voluntary decision by seropositive individuals to notify (or ask for assistance in

> notifying) their sexual partners and individuals with whom they might have shared needles. The ACLU has opposed mandatory contact tracing programs for [HIV infection and AIDS], but does not oppose voluntary partner notification programs."
>
> -from "Mandatory Contact Tracing," AIDS and Civil Liberties Project, ACLU

The AIDS and Civil Liberties Project of the American Civil Liberties Union (212-944-9800) has developed a series of twenty position papers examining issues raised by the HIV/AIDS epidemic. The papers are available to the public for a nominal duplication fee.

Other position papers discuss issues such as mandatory pre-natal HIV testing, restrictions on educational materials, criminalizing transmission of the virus, insurance issues, testing of hospital patients, intravenous drug use and AIDS, etc. (The complete collection of position papers is available at the Regional Health Education Center Reference Library, Putnam/Northern Westchester BOCES, Yorktown Heights, NY.)

Also, please see the following pages for outlines of advantages and disadvantages regarding mandatory contact tracing programs.

This question is one many students find difficult to relate to in the abstract. However, it's useful to present it this way, then move to a more personal approach so they begin to see that many abstract questions can and do have a personal application. It is also interesting to see how, and if, students' perceptions of the issues at hand change once the question becomes personalized.

II. Preparation

1. You may want to duplicate copies of the advantages/disadvantages sheets which follow and offer them to students at some point during or after the discussion.
2. Cut and fold enough slips of paper so that each student in the class will have one. Mark several of the pieces of paper with solid black dots, and several of the slips with hollow dots.
3. You may also want to have on-hand accurate information about HIV infection, what it is, how it's transmitted, and how it's prevented. (See Appendices A and B.)

III. Other interesting resources for the discussion of civil liberties, ethics and HIV infection include:

- The Hastings Center (914-762-8500), specializing in issues of bio-medical ethics.
- The Intergovernmental Health Policy Project of the George Washington University, 2011 I St. NW, Suite 200, Washington DC, 20006, 202-872-1445, specializing in the collection and coordination of public policy and other information about HIV infection on a state by state basis. We are indebted to IHPP and Executive Director Richard E. Merritt for permission

to reproduce materials from their book AIDS, A Public Health Challenge, Volume I: Assessing the Problem. (Available at the Regional Health Education Center Reference Library, Putnam/Northern Westchester BOCES, Yorktown Heights, NY.)

IV. For Future Reference
Supreme Court decisions in related cases include *Prince William County v. Torcaso*, and *School Board of Nassau v. Arline*.

Tie-ins to the New York State Social Studies Curriculum

1. Students will add to their awarenesses of the Constitution and its principles as persistent themes in the development of the American nation and its people.

2. Students will examine the deeply-rooted democratic values of United States society as they apply to particular situations, and consider how these values have changed over time.

3. Students will develop their abilities to explore the inter-relationships among events, ideas and the formation of public policy in the United States.

4. Students will develop their abilities to analyze various points of view and arrive at an intellectually honest personal commitment.

5. Students will develop their capacities to accept and defend democratic beliefs and procedures in decision-making in government and interpersonal relations.

Activity Outline

1. Introduce the activity by asking students to imagine they are an active part of the process of defending their rights under the Constitution. Remind them that this process is still very alive today, particularly with regard to the HIV/AIDS epidemic.

2. Tell students they will be discussing and exploring the Constitutional issues raised by a question faced today by public health and other policy makers. Write the question on the board: "Should the state require individuals infected with HIV to furnish the identities of his or her contacts (sexual and/or needle sharing) who also might have become infected?" Be sure students understand what the question is asking.

3. Ask students to take a minute to think about the question, perhaps jotting down their initial response and all the reasons they can think of to support it. Ask them to consider what Constitutional rights are involved. Have a recorder make a "Yes" and a "No" column on the board and keep track of the responses as well as the issues at hand.

4. Ask students to share their initial responses and points of view.

5. Ask each student to take a piece of paper from a hat or other container. Tell them that some of the papers are marked with solid black dots, which indicate that they have HIV infection, or hollow dots, which indicate they may have become exposed to HIV infection via sexual contact or shared needles. The rest of the slips of paper are blank, indicating that these students neither have HIV infection nor are at risk of exposure at this time. Be sure the students understand they are NOT to reveal what's on the paper to anyone for the duration of the lesson, including homework assignments and the discussion of Question II (see the following acitivity). (Note: ideally, the dots should represent the ratio of infected or exposed to infected in the larger society.) The teacher should take a piece of paper as well.

   Once each student has a slip of paper, ask them to pretend that some people in the class really are infected, and that some may have been exposed. Ask students to comment on how they feel sitting in the room. Questions for discussion could include:

   - Do you want to know who's infected? Who may have been exposed? Why/why not?
   - If you liked someone in class and wanted to go out with them, would you feel you had a right to know if they'd been infected or exposed? What rights does the Constitution guarantee you in terms of this question?
   - If you were infected, would you feel your right to privacy was more important than anything else, including letting someone know they may have been exposed to HIV infection?
   - To what extent would you want the government to be involved in your personal life? What responsibility under the Constitution does the government have to protect its citizens?
   - What if it weren't you, but someone in your family we were talking about? Would you think they had a right to know if they'd been exposed, or that their partners would have a right to know?

   Ask students to discuss these questions, then to re-examine what they've already put on the board. What changes or additions would they want to make?

   Then, ask students to examine the implications of the HIV/AIDS epidemic for society. Some people believe that when a society faces a crisis like the HIV/AIDS epidemic, individual rights become far less important than the survival of the society, and society must be saved at any cost to individuals. What are the Constitutional implications of this point of view?

6. If you do not plan to use Question II with your class, you may wish to discuss the black dot exercise at this point. Questions for discussion

might include:

- How did you feel when you got your slip of paper indicating your HIV status? (Allow students to articulate feelings.)
- What influence, if any, did the slip of paper have on your participation and/or your opinion about the question(s) discussed?

7. For homework: Ask students to write a 1-2 page position paper on the question, "Should the state require individuals infected with HIV to furnish the identities of his or her contacts (sexual and/or needle sharing) who also might have become infected?" Students should be sure to address the issues raised in discussion that both support and oppose their own point of view. (You may wish to hand out the advantages/disadvantages summary to assist them.)

Follow-up Activities

1. Ask students to write a position paper about the importance or lack of importance of personal civil rights in the face of national crisis. They should research other periods in United States history when this question arose, draw parallels between the periods of time, and use the information to help them create a strong and persuasive position. (For example, the legality of interning American citizens of Japanese descent during World War II was upheld by the Supreme Court in the interest of national security. Was that right or wrong?)

2. Ask students to imagine that an HIV/AIDS policy maker of today has the opportunity to travel back in time to consult with one of the framers of the Constitution about the general question of personal liberties vs. the safety of society, or the specific issue of mandatory name reporting. What feelings would the Constitution-framer have about the importance of the Constitution, personal liberties, etc? What advice would he give? How would the policy maker respond? Ask the students to write out the five to ten minute dialogue that would take place (i.e., between Thomas Jefferson and former Surgeon General C. Everett Koop). Students could work in pairs, then perform their dialogues for the class or type them up for distribution.

Civil Liberties and HIV Infection - Question II.

Overview of the Lesson

Students explore the Constitutional implications of the question: "Should the government require that names and addresses of individuals with positive test results for HIV antibodies or a specific diagnosis of AIDS be reported to the government?"

Teacher Background

This lesson may be used in addition to or instead of the preceding exploration of Constitutional rights and the issue of mandatory name reporting.

See the following pages for summaries of advantages/disadvantages to such a policy, as well as the ACLU position paper "Mandatory Name Reporting" (available at the Regional Health Education Reference Center Library, Putnam/Northern Westchester BOCES, Yorktown Heights, NY.)

Lesson Outline

1. See Question I (preceding) for a discussion format.
2. Ask the class to discuss the following questions:
   - How did you feel when you got your slip of paper indicating your HIV status? (Allow student to articulate feelings.)
   - What influence, if any, did the slip of paper have on your participation and/or your opinion about the question(s) discussed?
3. For homwork, ask the class to consider all the points raised in class discussion and write a brief essay in response to the question, "Should the government require that names and addresses of individuals with positive test results for HIV antibodies or a specific diagnosis of AIDS be reported to the government?"

Follow-Up Activity

1. See Question I.

Teacher Background

POLICY CONSIDERATIONS FOR ACTIVE CONTACT TRACING

Advantages

No cure is yet available for HIV infection and the most that public officials can do, besides educating the public, is actively reduce the number of people who may be exposed to the virus. Notifying people who may not know they have been exposed to the virus may keep others from being exposed.

Active contact tracing, especially in low seroprevalence areas, may be particularly effective in identifying and notifying those individuals who have no idea that they have been exposed to the virus. Particular concern is raised about women in their childbearing years who may unknowingly be the sex or needle-sharing partners of infected individuals.

Some patients are disinterested or hostile towards their sex or drug using partners and may never notify them of their exposure to the virus.

Through contact tracing for other STDs, public health officials have established expertise and a positive track record in maintaining confidentiality and in notifying and counseling contacts.

Active contact tracing by health officials reduces the provider's responsibility and liability for determining when it may be medically appropriate or necessary to notify individuals who may be exposed to the virus.

Active contact tracing provides individualized counseling to persons difficult to reach through traditional or mass education programs. This educational message is essential in preventing the spread of HIV infection.

Health officials are more likely to maintain a patient's confidentiality than the patient himself. Officials who notify contacts do not reveal the name of the index person; patients who must notify their own contacts reveal their identity in the process.

Many individuals are uncomfortable notifying their own contacts and need additional support or encouragement.

It is easier to control the quality of the counseling message when trained professionals notify contacts.

Disadvanges

Surveillance is very labor intensive and expensive. The negative psychological and social impact of being told one is a possible contact of an HIV-infected person may be as damaging as the risk of being exposed to the disease. Thus, active contact tracing programs that do not provide appropriate psychosocial support may do more harm than good.

Ironically, women, more often than men, may be the targets of limited contact tracing -- because of concern for their child-bearing capacity. However, unlike gay groups, women have not had an opportunity to organize themselves to protect themselves from possible breaches of confidentiality, potential discrimination and uneven access to essential support and referral services.

Reprinted from **AIDS, A Public Health Challenge Volume 1: Assessing the Problem**, 1987 by permission of the Intergovernmental Health Policy Project, The George Washington University.

Active routine contact tracing would be difficult to implement without strong legal safeguards regarding confidentiality and preventing discrimination.

The process of contact tracing is voluntary by definition:

- o Infected persons may not wish to release the actual names of their contacts for many reasons and could in fact, give false names to public officials.
- o Some persons may not wish to voluntarily identify their sex or needle-sharing partners, especially if they were engaged in illegal or illicit behavior.
- o In a voluntary notification system, anyone who wishes to notify contacts can request the aid of public health officials. Thus, with proper counseling, encouragement and confidentiality safeguards, local and state officials can help identify, trace and notify contacts.

In most states, patients who do not wish to notify their own contacts voluntarily may ask health officials or other providers for help. This preserves the individual's right to privacy while making professional help available.

There are different degrees to which names of contacts may be actively sought, traced and contacted. Policies may be developed to require notification in special situations where health care providers should personally notify contacts who have definitely been exposed to the virus. This would not require providers to engage in active contact tracing of all other partners.

Active contact tracing programs, especially in high seroprevalence areas, may consume inordinate staff and counseling resources, when similar or equally effective results may be obtained from targeted educational and outreach programs.

POLICY CONSIDERATIONS FOR REPORTING HIV ANTIBODY TEST RESULTS (WITH IDENTIFIERS)

Advantages

Reporting HIV antibody test results provides necessary data to track prevalence, transmission and seroconversion rates. Data can also be used to target service and education programs while evaluating their effectiveness.

Public health authorities can locate and counsel individuals who have been tested but fail to return for post-test counseling.

Seropositive individuals need not reveal their true name in order to provide the state with some identifying information to be used for legitimate follow-up purposes.

Public health authorities can contact health providers working with seropositive individuals to ensure proper counseling and follow-up care is given.

Health officials can contact persons at high risk of progressing to AIDS when appropriate or therapeutic drugs become available.

Names of antibody positive persons provide a base for establishing confidential contact tracing programs, which have proven successful in reducing the transmission of other sexually transmitted diseases for which antibiotic therapy is available and rapidly effective.

Disadvantages

High-risk individuals may be discouraged from seeking voluntary tests or needed medical care (because they fear discrimination or breaches in confidentiality) if positive test results accompanied by names or other identifiers are reported to the state. This would undermine state efforts to broaden voluntary testing programs or test those who may be at highest risk of transmitting the virus.

If the primary goal of HIV reporting is to improve the accuracy and completeness of the state's epidemiologic data base concerning HIV infection, states may require positive tests results to be reported without identifiers.

Testing in low-risk populations may yield relatively more false positives. Testing will also not reveal a person's chances of progressing to AIDS. If names of seropositive individuals are automatically reported to the state, this may have serious consequences for individuals who are falsely reported to have HIV antibodies.

Health officials may still contact referral physicians or health care providers to aid their counseling and education activities without knowing the name of individual patients.

Accumulating large lists of names of HIV-infected persons may require strengthening confidentiality laws. Maintaining such lists also increases the opportunity for the information to be misused or disclosed inappropriately.

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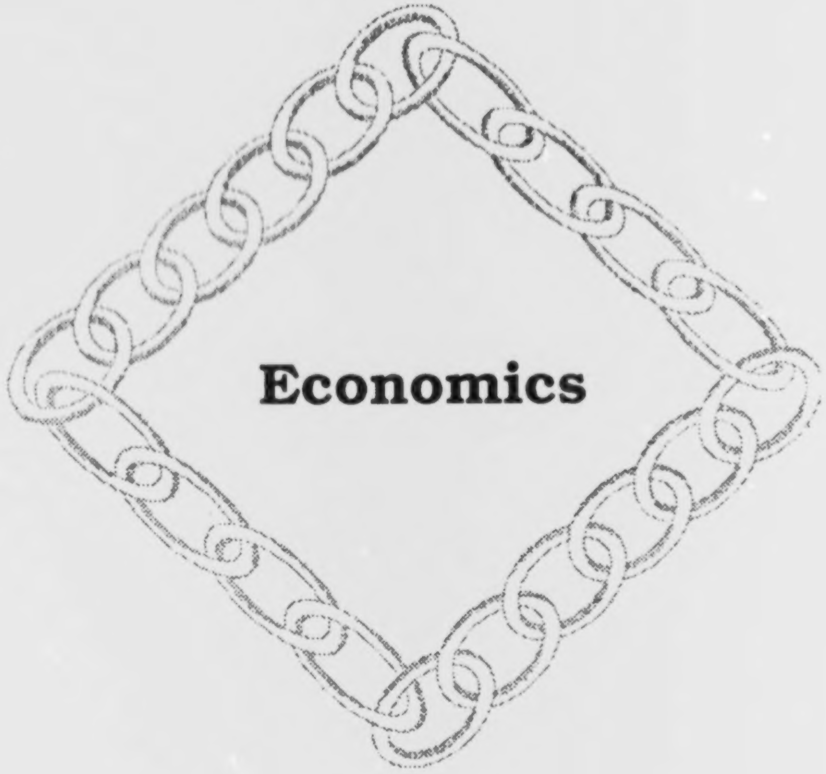
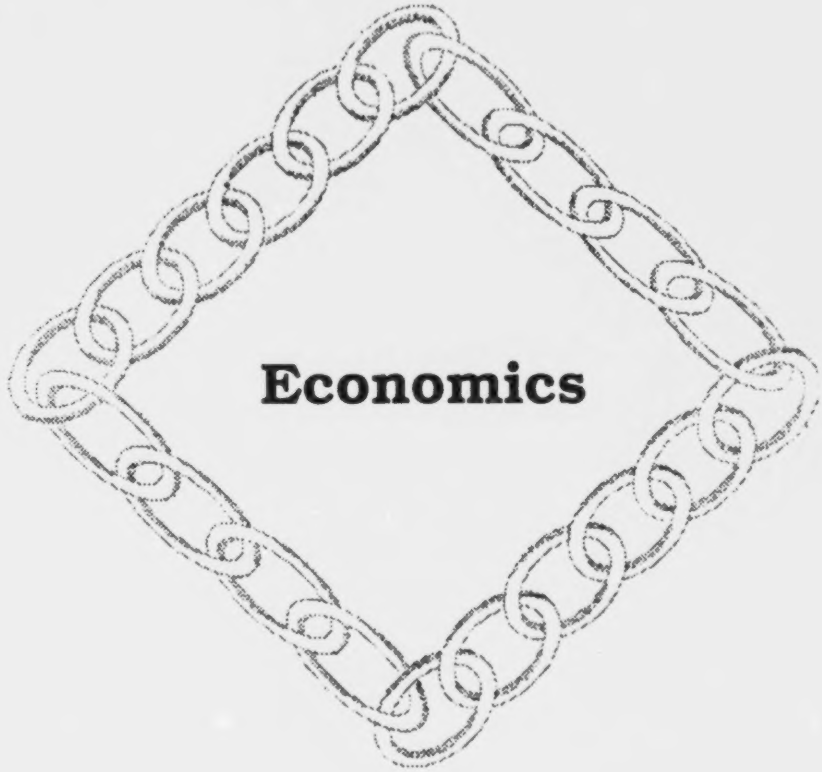


Economics



Economics

Teacher Background: The Cost of HIV/AIDS

As American citizens, we're accustomed to measuring the importance of events, be they progressive or disastrous, by the cost. Dollars earned or owed, human lives and potential nurtured or cut short, opportunities gained or lost— these are only some of the criteria we use when weighing the cost of something to ourselves as individuals or as a society.

How much has the HIV/AIDS epidemic cost, and what are costs likely to be in the future? What are the implications for HIV prevention, research, and health care? Who's going to pay? Understanding these issues is critical if we as a nation are to plan effectively for the future.

AIDS & HIV Infection

HIV infection occurs when an individual has been exposed to and becomes infected with the Human Immunodeficiency Virus. HIV infection is also called HIV disease. An individual with HIV infection may show no symptoms and require little medical attention, or exhibit one to several symptoms and require ongoing medical attention.

AIDS, or Acquired Immune Deficiency Syndrome, is the term for the severe illness that is the end stage of HIV infection. It is characterized by opportunistic infections, such as Kaposi's Sarcoma or PCP, *Pneumocystis carinii* pneumonia, which are increasingly debilitating for the sick person and demand specialized medical care. A person may be infected with HIV for many years before showing any symptoms or developing AIDS. (See Appendix C for further information.)

As of May 1990, the number of reported AIDS cases in the U.S. totalled 136,204. (1) By 1991, Public Health officials estimate there will be 56,000 to 71,000 new cases; by the end of 1993, 61,000 to 98,000 new cases.(2) However, other experts believe the incidence of AIDS cases is highly underreported and predict the actual number will be much larger.

In addition, Public Health officials estimate that an additional 2 million people will be infected with the HIV virus by 1991. Other researchers estimate that from 2.5 to 3 million infected individuals will exist. What might the economic impact of such a situation be?

With such uncertainty about the actual number of AIDS cases and HIV infected individuals, and a progression rate that is so unpredictable, any cost estimates are likely to have a considerable margin or error. However, one study made the conservative estimate that if two HIV positive individuals existed for every one person with AIDS, the costs for the HIV positive persons would equal 70% of the total estimated cost of persons with AIDS. Clearly, the total care costs of the epidemic are much greater than those reported solely about persons with AIDS. (3)

The Costs

A complete economic picture of the HIV/AIDS crisis includes the documentation of both direct and indirect costs. Direct costs incorporate personal medical costs and non-personal direct costs. Personal costs include such items as medical care, prescription drugs, hospital inpatient and outpatient services, nursing home, hospice and home care services. Non-personal costs include education, research, blood screening and testing, replacement of blood and support services, from counselling to help with housework, etc.

Indirect costs include costs for morbidity, or the value of productivity losses due to illness and disability; and mortality, the present value of of future earnings lost for those who died prematurely as a result of the disease.(4)

The Direct Costs

The exact direct personal costs of the AIDS epidemic are difficult to predict for several reasons. As stated before, uncertainty about the actual numbers of cases makes calculating costs difficult. In addition, cost differences in the treatment of AIDS exist from region to region, depending on the population, the services available, and the attitudes about the illness that exist within the community.(5) Different presenting conditions of AIDS lead to differences in treatments, therefore to differences in cost estimates. (For example, *Pneumocystis carinii* pneumonia, or PCP, is generally more expensive to treat than Kaposi's Sarcoma.) And, the more experienced a hospital is with the treatment of AIDS, the lower the costs appear to be. (Economies of scale may lead to more efficient care.)(6)

Over time, the costs for treating PWAs (persons with AIDS) have dropped, due in large part to the rise in out-of-hospital care, as well as the shortening of the average hospital stay. In terms of 1988 dollars, the lifetime cost for AIDS patients is now estimated to be $40,000 to $80,000, and most likely between $50,000 to $60,000. National medical care costs of $6.6 billion are most recently estimated to equal about 1.2% of estimated total personal health care expenditures for 1991. (5)

Unfortunately, few of the empirical studies include the costs of all services needed by AIDS patients. National studies try to include all medical care costs, though not the costs for such items as support services, i.e., spiritual or psychological counselling, help with housework, shopping or dressing (4), outpatient drugs and certain other drugs. (6) Also not included are costs for education, research and blood screening. It has been estimated that all of these "non-personal" costs will make up as much as 27% of anticipated medical care costs by 1991. (4)

Another factor usually not considered in studies of AIDS-related costs is that pediatric AIDS is more expensive to treat than adult AIDS.(5) One reason? All too frequently, hospitalization may be medically unnecessary for the children, but if their parents are unable to provide care due to illness, poverty or IV drug use and foster homes are not available, there is no place else for them to go.

On an individual level, AIDS is a personal financial tragedy for persons with AIDS and their families, as well as for the communities hardest hit by the disease. Early intervention in HIV disease (a person who is HIV positive with few or no symptoms) is estimated to cost close to $10,000 per year.(7) Costs for AIDS are higher.

New York State Health Department statistics from 1988 indicate that during a single year, an individual with AIDS might experience an average of 1.95 hospital admissions per year, with an average stay of 19.5 days, for a total cost per stay of $18,700. During 1988, the average length of a pediatric stay was 15.5 days, but children less than one year of age had an average length of stay of 40 days.(8)

Outpatient visits for adult and pediatric patients can number from 16-24 a year, ranging in price from $33 to $264 depending on the nature of the visit. Newborns, however, require around 28 visits.(8)

One particularly prohibitive aspect of HIV infection and AIDS care is the cost of prescription drugs. It is estimated that 75% of the nation's prescription drug expenses are paid for out of pocket, (14% are covered by insurance, 11% by public programs.(5) Although there is not yet specific data, out of pocket drug costs of PWAs may be this much or higher.

For example, the cost of aerosolized pentamidine (used in treating PCP) is estimated to be $2,500-4,000 per year. AZT, another expensive drug, can increase the life expectancy of a person with AIDS by more than 6 months, but the cost per year can range from $2,500 to $8,800 depending on the dosage. (A decrease in dosage lessens the cost.) (AZT and aerosolized pentamidine are also used prophylactically to delay the onset of AIDS.)

In terms of the overall impact of prescription drugs on an individual's costs, it appears that a person with AIDS on AZT will have the same lifetime costs over a longer lifetime as a person with AIDS not on AZT with a shorter lifetime. For the first six months on the drug, a person with AIDS will have lower costs than a person not on AZT.(5)

The Indirect Costs

The costs of the epidemic are also measured in terms of the indirect costs. Between 1985-1991, it is estimated that 80-84% of the costs of the AIDS will be indirect.(4) Most (93%) of these indirect costs represent losses due to premature death.(3)

In New York State alone, AIDS mortality costs were estimated to be $1.4 billion in 1987. The high indirect costs of the epidemic are due to the age group of the majority of PWAs— 20 to 49, the most productive time of life.(8) **By 1991, it is estimated that the indirect costs of AIDS will total 12% of the total indirect costs of all illnesses.**(4)

Paying for Care

National research shows that as of 1989, Medicaid covered 40% of all persons with AIDS, and paid 25% of their total costs. In public hospitals, the majority of persons with AIDS are covered by Medicaid or are self-pay. Self-pay cases frequently turn to uncollected bills. And as the medical community becomes more proficient at dealing with AIDS-related illness and care slowly shifts to an outpatient basis, the costs to PWAs will be even greater because Medicaid pays less for out-patient than for inpatient care. (5)

In community hospitals, the majority of PWAs have private insurance. The average total amount paid by an employer-based or private insurer for a person with AIDS is $50,000. (6) However, the number of PWAs covered by private insurance is dropping.(3)

Because hospitals paid by Medicaid recover only a percentage of their real costs for AIDS care, expenses must be met by raising costs of non-AIDS related services. Tax revenues are another important resource for communities with high rates of infection. It has been reported that the costs of AIDS patients in New York City municipal hospitals exceed Medicaid reimbursements by $300 per patient per day. Estimates also indicate that local tax revenues paid for 27% of the total costs of AIDS care in New York City in 1987. Other estimates indicate that by 1991, each New York City resident will pay an additional $100 in taxes, while San Francisco residents will pay approximately $350 per person to fund the cost of AIDS.(9)

Because so many persons with AIDS are eligible for federal programs, ie. Medicaid, Disability Insurance, Social Security Insurance, and programs of the Department of Veterans Affairs, the federal government will continue to bear the major financial burden for medical care and disability assistance. And yet, of the total federal monies allocated for AIDS-related expenditures bewteen 1982 and 1989, only 34% was for medical care, with an additional 6% for cash assistance. Forty percent of the 1982-89 spending was for research, and 20% was for education and prevention. (10)

During that time, more than $5.5 billion was spent on AIDS, with agencies of the Public Health Services accounting for roughly 60% of that spending. As of June 1989, federal expenditures for AIDS equal approximately 1% of all federal health expenditures. That figure is likely to increase to 1.8% by 1992. By 1992, federal AIDS spending is likely to reach $4.3 billion (less than 2% of total federal health costs). (10)

Current levels of federal funding for research, education and prevention are comparable with amounts budgeted for other major diseases. However, indirect costs are thought to be more fair reflectors of the actual cost of the disease. In addition, comparisons with other diseases may be unfair since HIV is infectious and continues to spread. (10)

AIDS, Issues and the Future

To date, costs for treating AIDS have been lower than expected, but Anne A. Scitovsky, Chief of the Health Economics Department of the Research Institute of the Palo Alto Medical Foundation notes "recent changes that are likely to grow more pronounced in the future are fundamentally altering the economics of the epidemic." (5)

First and foremost are the impacts of continued improvements in medical care. As persons with AIDS are treated earlier and more agressively, their life expectancies are increasing. Pharmaceuticals, costly and largely uncovered by insurance, play an increasingly important role here. And as AIDS becomes a chronic condition, long-term care and its financing will become an issue of critical importance, as will the ability of PWAs to finance their costs. During a longer lifetime, under the existing financing systems for HIV disease, more PWAs are likely to exhaust or be disqualified from private insurance, deplete personal savings and become dependent on Medicaid or their state and local governments. (5)

Another change is the anticipated shift in infected persons. Currently, the largest group, or "first wave" of infected people is homosexual men (infected between 1982-84). (11)

The next largest group of HIV infected with AIDS, or "second wave", is IV (intravenous) drug users (IVDUs). However, the numbers of infected women in urban minority communities are starting to rise (because of their own IV drug use or their sexual involvement with IVDUs), as are the numbers of infected babies. (11)

But AIDS is not only the disease of the poor, the IV drug user, or the minority populations. New data indicates that the "third wave" of the disease is building in the 15-24 year old age group due to increased sexual activity and drug use. (12) And to believe the middle or upper class heterosexual population is safe is naive. "HIV is firmly entrenched in the heterosexual population of this country," according to Dr. Paul Volberding, chief of AIDS activities at San Francisco General Hospital. "It will spread slowly, but there is no reason I can find to believe it won't spread....We can close our eyes, but it won't go away." (13)

A final significant change in the epidemic that may lead to unforeseen economic consequences may be the spread of the disease beyond the cities where it was concentrated in early years. According to

Anne Scitovsky, "The HIV epidemic can be regarded as a number of local epidemics, differing from each other in the characteristics of their patient populations, in the availability of the various resources providing medical and support services for such patients, in the organization of these resources, and even in the attitudes of the providers of care to HIV-infected persons. For these reasons, patterns of use and cost may vary widely between different locations, and a system of care that is cost-effective and satisfies patients in one location may not be successful in another."(5)

These issues must be studied and planned for now. In the view of Rep. Henry D. Waxman (D-California), chair of the House Energy and Commerce subcommittee on Health: "AIDS has shown in harsh light the cracks and flaws in the American health care system. It is a crystallization of the worst problems in preventing illness and caring for the sick. AIDS has shown that our insurance system is unfair. If you lose your job—because of economics or because of illness— you lose your insurance. AIDS has shown that Medicaid is shallow and inadequate. AIDS has shown that we can produce medical miracles for the rich and plain neglect for the poor. AZT is priced for kings and Medicaid is for people who have been made paupers. These failures, however, are not unique to AIDS. AIDS has only shown them in bold relief." (14)

Without adequate long-range planning, the situation will only worsen. Jeffrey Harris, associate professor of economics at MIT, emphasizes that "the sad fact is that people who test positive [for HIV] will become an underclass in our society." (15)

And for the rest of us? According to Peter Arno of Baruch College/Mt. Sinai School of Medicine in NYC, whether due to higher taxes, increased insurance costs, or a deterioration in the quality and availability of health care and public services, "this epidemic will touch everyone's life and everyone's pocketbook." (16)

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Setting a Fair Price: A Case Study in Supply, Demand and Opportunity Costs

Introduction

The basics of economics can seem so straightforward in text books: target a need, assess the market, develop a product, set a price, sell the product. However, in real life, economics and social issues must exist side-by-side, and the coexistence is not always peaceful. This lesson gives students the opportunity to think about the principles of economics in the context of a social dilemma: Should economic principles be swayed by human concerns? Is it possible to set a fair price when human lives are at stake?

Overview of the Lesson

Students examine the interaction of basic economic principles with strong social opinion in the pricing controversy over AZT, the first drug approved to treat HIV disease.

Objectives

1. For students to examine the interaction of basic economic principles in a real-life situation: the question of supply and demand in the context of scarcity.

2. For students to expand their knowledge of and sensitivity to HIV infection and related social issues as part of a society's economic decision-making; i.e., opportunity costs.

3. For students to evaluate available information and formulate an opinion about AZT pricing.

Teacher Background

I. The Cost of AZT: An Overview

From early in the HIV epidemic, the cost of the anti-viral drug AZT (up to $10,000 a year in 1987; $6,400 to $8,000 into 1989) has been the source of intense controversy between AIDS activists and the pharmaceutical manufacturer Burroughs-Wellcome, as well as among industry-watchers. AZT works by interrupting the replication of the AIDS virus in cells, and must be taken continuously for that result to occur.

The Burroughs Wellcome Co. Story

Burroughs Wellcome Co. attributed the cost of the drug to a number of factors. In any research-based pharmaceutical company, the drugs currently on the market pay for current and future research. The investment of bringing a new drug to market averages 7 to 10 years and $125 million, with a relatively high research failure rate. The manufacture of AZT also involves an unusually complicated, therefore more costly, process than other drugs.

In addition, when AZT was first developed, it started as what is called an "orphan drug," meaning it would treat fewer than 200,000 people a year. (Very successful drugs treat millions of people a year. Under an orphan drug patent, a company has exclusive rights to a product for 17 years, then generic companies can make and sell the drug--if they can figure out how to do so.) Due to these factors, Burroughs Wellcome Co. set the initial wholesale cost at $1.88 per capsule.[1] (With a dosage rate of up to 12 capsules per day, and a retail markup of up to 37.5%, persons with AIDS could expect to pay up to or more than $10,000 per year.) Later in 1987, after production was streamlined, the wholesale price of AZT dropped to $1.50 per capsule.

ACT UP and the Price of AZT

In September of 1989, the activist group ACT UP (AIDS Coalition to Unleash Power) staged a demonstration against Burroughs Wellcome on the New York Stock Exchange. Their main contention: that due to extreme and unfair pricing in a situation where Burroughs Wellcome already had a monopoly, Burroughs Wellcome was making a literal "killing" on AZT.[2] The profit ratio was too high, but persons with AIDS (PWAs) desperate for any solution were forced to pay the price. Soon after the Wall Street action, Burroughs Wellcome Co. lowered the wholesale price of AZT by 20%, to $1.20 a capsule. (Cost to an individual per year: $3,000-$8,000.)

According to Burroughs Wellcome officials, the price reduction was made not in response to pressure from the demonstration, but because they anticipated an increase in the size of the AZT market. Previously, AZT use had been restricted to individuals diagnosed with AIDS. However, in August 1989, new data suggested that AZT delayed the onset of AIDS in HIV infected individuals who had few or no symptoms. (In 1987, company officials estimate that 20,000 individuals were using the drug; 1989 estimates are double.) In 1989, AZT sales totalled $159 million, $113 million of that in the United States. (Burroughs Wellcome Co. overall sales totalled $2.2 billion, with a pre-tax profit of $390 million.)

In January of 1990, the FDA approved a new dosage schedule for AZT, cutting the original recommended daily dosage in half, therefore cutting the cost for many individuals (average annual cost: $6,400).

II. Materials

The Wall Street Journal article summarizing the action, the history of AZT, the Burroughs Wellcome Company, and the pricing/profit dilemma within the industry follows.

III. Preparation

1. Duplicate enough copies of the Wall Street Journal article and the student handouts so that each student will have one.

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1. Source: phone conversations with Burroughs Wellcome public relations officials, and Burroughs Wellcome public relations materials, September, 1989.
2. Source: phone conversations with members of the organization ACT UP (AIDS Coalition to Unleash Power), October, 1989.

2. You may find it useful to review the background information on the cost of AIDS at the beginning of the Economics section.
3. You may also wish to see pages 28-30 of the State of New York Social Studies Tentative Syllabus, *Economics and Economic Decision Making.*

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to organize, analyze, interpret and make generalizations about economic information based on relevant data.

2. Students will demonstrate the ability to make decisions about economic, social and political questions confronting them.

3. Students will gain insight into the political and social impact of economic decisions, and the economic impact of political and social decisions.

4. Students will develop their understanding of basic economic concepts.

The Activity Outline

1. Introduce the activity.

2. Review basic information about HIV infection, including what AZT is and why it is important.

3. Give students an overview of the AZT pricing history from the Burroughs Wellcome Co. point of view. You may wish to duplicate the Teacher Background notes as they appear here. Also, see student handouts for details.

4. Ask students to identify economic principles at work in the way Burroughs Wellcome established their original price, as well as during each subsequent price cut. Discussion questions could include:
   - Is the demand for AZT elastic or inelastic? What reasons can you give for your answer?
   - Is the supply of AZT elastic or inelastic? What reasons can you give for your answer?
   - What impact has scarcity had on the demand for and pricing of AZT?
   - How have production costs affected the cost of AZT?
   - Did the 1989 price decrease in AZT affect the proft levels of Burroughs Wellcome? Why or why not? Do the laws of supply and demand apply to the 1989 decision? Explain.
   - What are the opportunity costs to a company like Burroughs Wellcome in developing a new pharmaceutical? How do these affect the pricing of AZT?
   - Describe the impact of the Burroughs Wellcome patent rights on pricing.
   - What impact do patent laws have on competition within the marketplace for pharmaceuticals? How do these affect the prices consumers pay?

Defend or attack the results of concentration of industry within the pharmaceutical industry.

5. Ask students if the price of AZT in 1987 seems "fair"; the price today? Do we think of prices in terms of "fair" or "unfair"?

6. Either for homework or in class, ask students to read the Wall Street Journal article from September 16, 1989 (article follows). Assignment A: Ask each student to name at least three economic or social points of view from the article which oppose the Burroughs Wellcome view. Then, ask students to write out or discuss their opinions of the pricing situation. Should Burroughs Wellcome further lower the price of AZT ? Why or why not?
   Assignment B: Divide the class in half. Ask one half of the class to take the viewpoint of Burroughs Wellcome Company and outline the opportunity costs in maintaining or lowering the price of AZT. Ask the other half of the class to take the point of view of a person or family of a person with AIDS and do the same.

7. Ask the students to report on their thinking in a class discussion. Other questions for discussion might include:
   - Don't companies have the right to make as much profit as possible? Could there be any economic effects of limiting profits?
   - What criteria do the students think should be used in establishing a "fair" price? Should fairness even be considered as a factor?
   - What role, if any, should the government have in limiting prices for orphan drugs?
   - Should the fact that human lives are at stake affect the price?
   - Should the fact that people with HIV infection face incredible economic hardships affect the price?

Follow-up Activities

1. Ask students to write a short essay on the following topic: The Pharmaceutical Maufacturers Association suggests that pharmacutical costs to consumers would be cut dramatically if FDA approval processes for new drugs were shortened. Discuss the opportunity costs of cutting or maintaining existing approval processes.

2. Ask a person with AIDS to come to class to talk about the economic realities of HIV infection.

3. Ask students to complete the lesson "The Personal Impact of HIV Infection."

4. Ask students to research and discuss the role of consumer activist or lobby groups (such as Act UP) in shaping legislation which affects price setting.

The Cost of AZT:
Student Information Sheet

Chart A.[1]

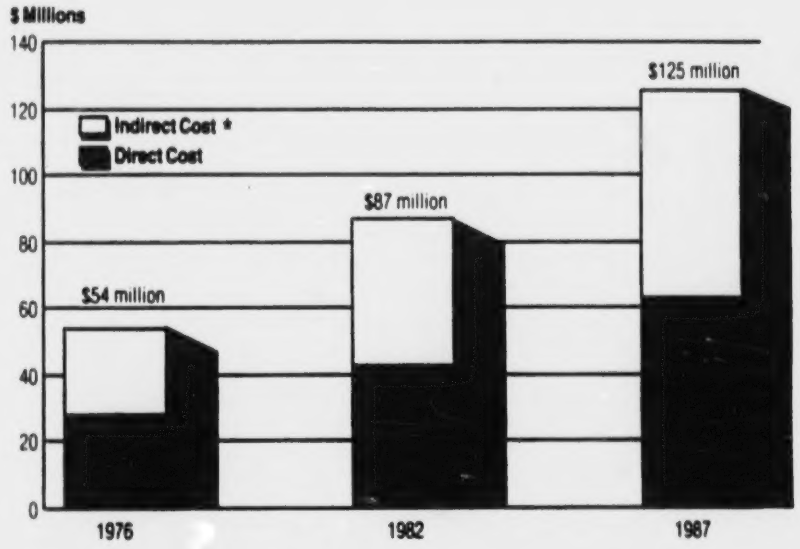
Date & Event	Wholesale Cost	# people using
1987- AZT introduced	$1.88 p/capsule	20,000
1987- Production scaled up	$1.50 p/capsule	20,000
1989- Change in approved AZT use	$1.20 p/capsule	40,000

Chart B.[2]

The High Cost of Drug Development

On average, it costs $125 million to bring a new drug through discovery, clinical testing, development and FDA approval to begin marketing. This cost has increased sharply in recent years. Major contributors to the increased cost include the intricate nature of modern research and the expense of the highly sophisticated laboratory equipment it requires. In addition, as the focus of research has shifted toward chronic and degenerative diseases, complicated and extensive clinical testing is often necessary to prove efficacy of new medicines.

Cost of Developing a New Drug



* Cost of money invested over time ("Opportunity costs")

Source: Steven N. Wiggins, Texas A&M University; Ronald Hansen, University of Rochester

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[1] [illegible]urce: Burroughs Wellcome Co.

[2] Source: Pharmaceutical Manufacturers Association, 1100 Fifteenth Street NW, Washington, DC 20005

September 9, 1990

Pricing Battle

Burroughs Wellcome Reaps Profits, Outrage From Its AIDS Drug

Mounting Protests Over Cost Of AZT Tarnish the Firm And Intensify Regulation

Irony of Charitable Ownership

By MARILYN CHASE
Staff Reporter of THE WALL STREET JOURNAL

Burroughs Wellcome Co. officers stood shoulder to shoulder with federal officials at a Washington, D.C., press conference just three years ago, proudly announcing the first major breakthrough against acquired immune deficiency syndrome: Wellcome's life-prolonging drug AZT.

Yesterday, activists in San Francisco, London and New York staged demonstrations attacking Burroughs Wellcome and its parent, London-based Wellcome PLC, as corporate extortionists. Five AIDS activists chained themselve to a balcony inside the New York Stock Exchange, sounding a horn to drown out the opening bell and unfurling a banner that read: "Sell Wellcome." Protesters also invaded pharmacies, pasting other Wellcome products with stickers reading "AIDS Profiteer."

The company is accused by activists and some health-care providers of reaping unseemly profits from AIDS patients and federally funded Medicaid by keeping the price of AZT, or azidothymidine, at a level that makes it one of the most expensive drugs ever sold–about $8,000 for a year's supply per patient.

Growing Profits

Driven in part by AZT, Wellcome's profits have doubled in the three years ended Aug. 27, 1988, to $198 million in its most recent fiscal year, and a bigger bonanza is just around the corner. As a result of a recent study confirming that AZT helps people who are infected with the lethal virus but not yet showing symptoms, the Food and Drug Administration is expected to authorize the compound for sale to hundreds of thousands, rather than just the tens of thousands who are sick with AIDS.

At the current price, Wellcome could generate $1.2 billion of AZT sales in 1992, with about half of that flowing to the bottom line as net profit. When the medical study was announced Aug. 18, Wellcome's stock jumped 32% in London trading.

People familiar with the FDA approval process think it is almost inevitable that Wellcome will cut the price of AZT after it is allowed to sell to the wider market, though by how much is unclear. But many AIDS patients and doctors believe Wellcome has already made too much money at the expense of the sick, pricing their drug so far out of the reach of some indigent and moderate-income people that the federal government has had to step in with hundreds of millions of dollars in subsidies–money that further bolsters Wellcome's profits.

Who Did the Work?

"Wellcome is involved in shameless profiteering," contends Curtis Morriss, administrator of the infectious-disease clinic at Atlanta's charity hospital, Grady Memorial. "They ought to be ashamed."

Particularly galling to Wellcome's many critics is that the AZT profits are something of a windfall for the company. Wellcome acquired the rights to AZT many years ago. But it didn't create the compound, it wasn't the first to discover its effectiveness against AIDS-type "retroviruses," it didn't uncover its effectiveness against AIDS itself and it didn't conduct the first human tests. Much of that work was done by other scientists, some at the National Institutes of Health with federal financing.

It is also a curious irony that Wellcome is being vilified as an AIDS profiteer, for most of its dividends go to charity, and much of its retained profits to research and development. It is 75%-owned by the Wellcome Trust, a charitable organization that has spent millions aiding pharmaceutical research and other causes.

The company pays out about 25% of its earnings in dividends, mostly to the trust, and spends heavily on research and development of experimental drugs for a wide range of diseases, including cancer, sickle cell anemia and multiple sclerosis. Its drug acyclovir is a leading treatment of herpes.

Recouping Costs

Moreover, analysts believe that Wellcome's gross profit margins on AZT, while very high at 70% to 80%, are in line with what other companies get from major new drugs. High returns are needed to finance research and development, and pay for "dry holes"–the many drugs that never reach market. Wellcome's main defense has been that it needs to recoup its up-front investment in AZT, which included paying for a major clinical trial, initially giving the drug free to as many as 5,000 AIDS patients and spending $80 million on a new plant and raw materials.

"There is a myth out there that we're robber barons, ripping people off," contends David Barry, vice president, research development and medical affairs of the Burroughs Wellcome unit, based in Atlanta. "It would be theoretically possible for us to give away all our drug," Dr. Barry says. "Everyone would get it for a while, and then we'd go bankrupt."

Demonstrations and talks with activists notwithstanding, he says there will be no "knee-jerk" concessions on AZT's price. He cautions the potential bonanza may be offset by several recent studies suggesting the drug may be just as effective at half the dose. Wellcome also may be hurt by a forthcoming anti-AIDS competitor, Bristol-Myers Co.'s DDI, or dideoxyinosine, which is still being tested.

"If there were a decision to lower price," Dr. Barry says, "it would be on a rational, quantitative basis."

Nonetheless, what started out as a triumph for Wellcome has turned into a public-relations disaster, and sparked a raging debate that raises many troubling questions about medical ethics, government policy and the role of private enterprise in drug development. Among other things, the flap promises to change the terms under which the government supports corporate drug research.

Wellcome isn't alone in its dilemma. Interferon, which is used in cancer treatment, can cost $9,800 a year, while a single dose of the heart-attack drug TPA can run $2,200.

But Wellcome has several unusual problems. The gay communities heavily affected by the AIDS virus are highly organized and politically adroit, unlike most other patient populations. Their target, Wellcome, is increasingly unable to mount a credible defense based on the argument that it needs to recoup its AZT investment. It has already been greatly enriched by its role in treating the epidemic. In the fiscal year ended in August, Wellcome logged AZT sales of about $220 million, and profit of about $100 million, analysts believe.

The profits for that single year would more than recoup all of Wellcome's initial investment in plant, equipment and materials for AZT. By 1992 analysts suggest AZT's annual sales could quintuple to more than $1 billion a year. Such blockbuster status is attained by few products.

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Justifying the Price

Some critics say that while a high return may be justifiable for lower-cost drugs, it is less so when it puts out of reach a drug that helps an expanding number of sufferers of a lethal epidemic, an epidemic that by its nature also financially cripples those people.

Matthew Ward, a 38-year-old writer in New York, has been taking AZT for 2½ years, and has exhausted his own and friends' funds to buy it. "One of the most dispiriting things was to have to get together that amount of money–$800 a month–in the midst of being ill," he says.

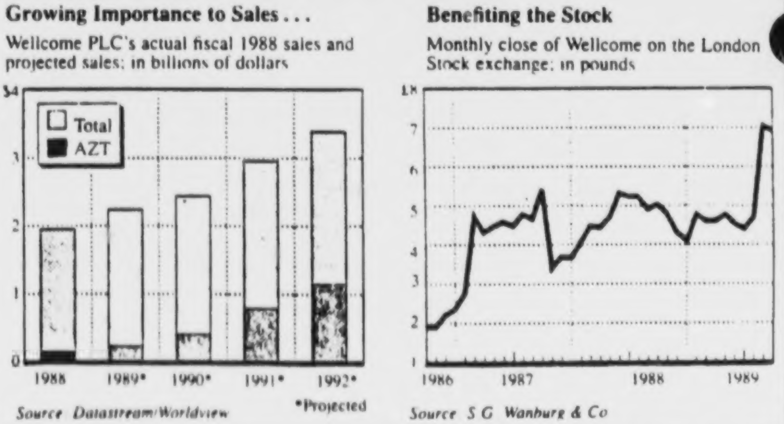
Business-as-usual isn't good enough, argues Peter Staley, a member of AIDS Coalition to Unleash Power, or ACT UP, the group that staged yesterday's stock-exchange action. "There's a difference between a $500 drug sold at 80% margins, and an $8,000 drug sold at 80% margins," he says. "We have a drug that could slow a world-wide epidemic, and it's being sold only to the people and the countries that can afford it. Africa isn't getting AZT."

"Many patients still can't get AZT," adds Joseph Wilber, physician and medical director of the AIDS Program of the Georgia Department of Public Health. "We have 18 patients in Savannah who doctors think should get AZT but there's no source. We've used up all our federal money." Moreover, because the FDA hasn't cleared AZT for use in children, the government hasn't set aside subsidies to buy the drug for this group.

Dr. Barry insists Wellcome has been a model of compassion, distributing AZT free prior to its initial marketing approval and launching a patient assistance program for the uninsured–though activists charge the program is so cumbersome only 300 people have actually used it. He points out that the company did cut AZT's price in December 1987, lowering the retail price to $8,000 from $10,000.

But Wellcome's moral position is undercut by its relatively minor role in the creation of AZT. The creator of the drug was Jerome P. Horwitz, chemistry chairman of the Michigan Cancer Foundation, who in 1964 synthesized the compound through grants from the National Institutes of Health and the local United Way chapter. AZT failed as a cancer therapy, and Mr. Horwitz's recipe was never patented, thus casting the compound into the public domain, where it remained for 20 years, a drug in search of a use.

AZT'S Impact on Wellcome PLC



Growing Importance to Sales . . .

Wellcome PLC's actual fiscal 1988 sales and projected sales; in billions of dollars

Source: Datastream/Worldview

*Projected

Benefiting the Stock

Monthly close of Wellcome on the London Stock exchange; in pounds

Source: S.G. Warburg & Co

Other Interest

Wellcome synthesized some AZT from the formula and began to explore its use, first as an antibacterial drug and later as an antiviral. Others were looking at it too.

Far from Wellcome's labs and long before AIDS struck, a West German scientist made a prescient finding. W. Ostertag and co-workers at Max Planck Institute for Experimental Medicine in 1974 published a study showing AZT in the test tube could block Friend leukemia virus, a mouse virus which, like AIDS, belongs to the class of so-called retroviruses, which transfer their genetic information in a backward fashion from RNA to DNA. A decade later, Wellcome confirmed his finding.

When the epidemic hit, few companies had labs equipped to handle live AIDS virus. So the government took the lead. At its National Cancer Institute, then-chief of clinical oncology Samuel Broder asked companies to send in candidate anti-AIDS compounds for screening. Among many samples sent was AZT, under the code name "compound S." In a screening system developed by NCI scientist Hiroaki Mitsuya, AZT wiped out the virus. In July 1985, Dr. Broder and his colleague Robert Yarchoan administered the first dose to a human being.

Wellcome complains that the government's role has been overstated. The company's 1988 annual report devotes a full page of text to clarifying this "misunderstanding" and defending its antiviral efforts and expertise. Dr. Barry grants there was a good deal of "collegial collaboration," but insists, "This is our drug."

Disclosing Details

Wellcome performed toxicology, pharmacology and animal studies before AZT was given to the first human volunteer, he says, and financed the big, multi-center clinical trial in patients, as well as bankrolling a give-away to 5,000 people prior to FDA approval.

But Wellcome still refuses to disclose its actual cost of development and production. In early 1987, Dr. Barry said raw materials and a sophisticated new plant had cost $80 millio but today company officials say that figu was incomplete, and omits ongoing research. Asked for a total, a spokeswoman, as a guide, simply repeats the industry average for any drug of $125 million.

"Why don't they release their numbers?" demands Larry Kramer, a playwright and founder of ACT UP. "Do they expect us to believe them at face value?"

Disclosure would only engender "false and misleading calculations," Dr. Barry replies. "Whatever number you give out, it'll be used to mislead."

Wellcome is now under pressure on many fronts to cut its price. AIDS activists are considering litigation challenging the company's patent, and its biggest customer, the U.S. government, is distinctly restive. Under Medicaid and other subsidy programs, the U.S. has already spent $320 million funding purchases of the drug. (An article in today's edition of the Journal of the American Medical Association estimates that total annual costs for early treatment of AIDS-infected people in the U.S. could run as high as $5 billion to $10 billion, mostly for AZT.)

Government attorneys are mulling over a wartime statute permitting the government to allow patent infringement by other companies when its own procurement of a product is threatened by the activities of a single supplier. The government could also threaten to revoke AZT's designation as an orphan drug, that is, a drug designed to treat a relatively small group of people. Orphan-drug development is encouraged by tax breaks and guarantees of exclusive marketing rights for seven years.

The FDA's Role

A more likely tack is public jawboning. Rep. Henry Waxman, a California Democrat who held hearings on AZT's price in early 1987, last week wrote the company, serving notice that Wellcome's original price rationale–achieving a decent return on investment during a short product life–no longer exists as the drug approaches its third anniversary and a burgeoning marketplace.

"The continued high price of the drug now appears to be an attempt to charge whatever patients, governments and insurers can scrape together because they are desperate and have no alternative," Rep. Waxman wrote to Burroughs Wellcome's president, T.E. Haigler. He said that was inappropriate in light of all the government help Wellcome received, and warned that his subcommittee on health and the environment may reopen hearings into AZT's price.

The FDA may play the biggest role in bringing AZT's price down. Drug analysts believe that Wellcome inevitably will cuts its price–conditioned on the FDA's expanding the approved use of AZT to people who are infected by the virus but haven't shown any symptoms. "It isn't quid pro quo, and you don't ever say it," says Samuel Isaly, a drug-company consultant. "It's done with winks and nods."

But scientists and ethicists warn that singling out one drug company, or one disease, for special treatment could be counterproductive in the long run.

'Reasonable-Price' Regulation

"I believe in letting companies have a reasonable return. But where does one draw the line and say you've made enough profit, and now it's unseemly?" asks Peter Jensen, chief of infectious diseases of the San Francisco VA Hospital. "Anytime you regulate, you risk killing the goose that laid the golden egg."

"Perhaps business as usual isn't good enough," adds Robert Levine, a Yale University ethicist and professor of medicine. But he is troubled by the ad hoc "patch-work" of subsidies for AIDS that leave deeper policy questions unsettled. "Whether the epidemic should change ordinary business assumptions isn't something society has addressed very carefully. We have many diseases as lethal as AIDS. If you change expectations for AIDS, should we also change them for cancer?" He warns against strangling creativity with over-regulation.

Many in Washington feel that perhaps the easiest way out of the dilemma is for the government to aggressively foster alternative drugs, letting the resulting competition drive down the cost rather than resorting to price controls. But just in case, Dr. Broder, now the National Cancer Institute's director, also wrote a "reasonable price" clause into all future licensing agreements covering transfer of an NIH-invented compound to a company for development.

Bristol-Myers's DDI, licensed from the cancer institute, is covered by such a clause, and some analysts believe it will eventually be sold at a substantial discount to AZT as a result.

No one is certain how the "reasonable price" clause would be enforced. However, an unduly high price could trigger a government order for a company to open its books. Any company found in violation could be sued by the government for breach of contract.

"It puts a company on notice that care should be exercised in pricing," says Barney Lepovetsky, the National Cancer Institute's director of technology development. "That moral position is established."

The Economic Impact of HIV/AIDS on the Average Consumer

Introduction

Each year, the average consumer makes countless decisions about how to use his or her money. Necessity or luxury item, spend or save, society's economy is driven, in part, by the economic decisions of its consumers. These decsions can be documented, and spending patterns described. But what if a consumer has HIV disease? How are their spending decisions affected? And what might the impact be on the larger economy? This activity is designed to enable students to experience some basic information about consumer-driven economics and then use that information to "walk a mile in the shoes" of an HIV-infected individual.

Overview of the Lesson

In Part 1 of the lesson, students use current salaries of actual careers and calculate their yearly cost of living expeditures as they explore the ideas of "luxury," "necessity," and the economic role of the consumer in society. Then, in Part 2, they consider the economic impact of HIV disease on these budgets and explore options for coping financially.

Objectives

1. For students to examine the spending habits of the average consumer within the context of a yearly budget by fitting expenses to a salary.

2. For students to consider the economic impact of HIV disease on a consumer's income and economic decision-making potential.

3. For students to gain a broader understanding of HIV infection, including the community services or resources available to assist the HIV-infected individual in coping financially.

Teacher Background

I. Preparation
1. Reproduce the page which follows, "Professions and Yearly Salaries," cutting along the dotted lines to make a profession and salary slip for each student in the class. You may wish to duplicate or eliminate certain professions based on your knowledge of the class.
2. Duplicate enough copies of the "Average Consumer Expenditures" worksheet so that each student in the class will have one.
3. Have current information on-hand about HIV infection and disease to correct myths or clarify confusions. (See Appendices A, B, C, D and G.)

4. You may wish to review the Teacher Background information on the economic impact of HIV disease at the start of this section, as well as Appendix F and the government listings in your local phone book for ideas of where in your own community to refer your students for information.
5. You may also wish to see page 31 of the State of New York Social Studies Tentative Syllabus, *Economics and Economic Decision Making*.

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to organize, analyze, interpret and make generalizations about economic information based on relevant data.

2. Students will demonstrate the ability to make decisions about economic, social and political questions confronting them.

3. Students will gain insight into the political and social impact of economic decisions, and the economic impact of political and social decisions.

4. Students will develop their understanding of basic economic concepts.

Activity Outline

1. Give students an overview of Part 1 of the activity.

2. Ask each student to pick a slip of paper from a hat. They are to pretend this is the work area and salary that they'll be involved in for the coming year. (Decide beforehand if you'll allow students to switch with one another.) This may provoke some interesting general discussion about differences between different jobs/careers in starting salaries/wages, work conditions, training requirements, etc.

3. Hand out the Average Consumer Expenditures worksheet. Discuss the breakdown of expenditures displayed by the pie chart so that students understand what's involved in each category. (This may be an opportunity to introduce some of the questions for discussion raised in number 6, following.)

4. Ask students to enter their names, professions and salaries in the spaces provided. Then, ask them to calculate what their average expenditures would be for a year based on the statistics provided.

5. If you have some newspapers or local advertising periodicals in the class, you may want to ask students to look at the ads for rental units, groceries, etc. to get an idea of what their money would buy in their geographic area. Then, they can complete the second column, "Average for your area."

This second column may be done in as much or as little detail as you have time for. Housing, food and utility costs vary tremendously in different parts of the country, and this may be a perfect opportunity for students to learn about the cost of living in their own home town or their own home. Give students the evening to research costs of specific categories, i.e., food, shelter, utilities and clothing. Then, either as part of the same homework assignment or in class the next day, ask them to compare their findings to the national averages, and to juggle their other expenditures to equal their salary. (Note: This would be an excellent assignment for students to do with their parents in order to gain an understanding of the economic constraints in their own family.)

6. What have the students observed so far? Discuss. Questions might include:
   - Could you afford to live on your own on your salary? What kind of lifestyle would your salary buy for you? If you wanted to move out of your parents' home, what options could you pursue?
   - How are your spending decisions affected by your salary?
   - How do consumers decide where and how to spend their money?
   - What is the difference between a luxury and a necessity? Which items on your Consumer Expenditures Worksheet are necessities? Which are luxuries?
   - How do consumers' decisions about spending and saving affect the overall economy?

7. Introduce Part 2 of the activity.

8. Ask students to "count off" A, B or C. Then, hand out the HIV situation sheet, and ask students to find and read their situation. (You may want to read the situations out loud so that all details are clear.)

9. Ask students to calculate the costs of their situation.

10. Ask students to consider how they would fit these additional costs into their annual expenditures from Part 1. Questions for discussion might include:
    - What would the impact of HIV disease be on their finances? Would they be able to make it?
    - How would HIV disease affect their range of choices as consumers, and in turn, their own impact on the economy? Would their spending priorities change? How or why not?
    - Discuss with them some of the financial options people have when they are HIV-infected. What might they do to cope financially?

For homework, or as an in-class assignment, ask students to investigate a local, state or federal resource that might help them cope financially; for example, Medicaid, ADAP (a program to assist with paying for AZT), local counselling services, public health clinics, etc. Ask them to consider how these resources are funded, and how that would affect them as taxpayers.

11. Ask students to share the ideas and information they've found. Then, move around the room, asking each student to fill in the blank on the statement "From doing this activity, I learned that ...."

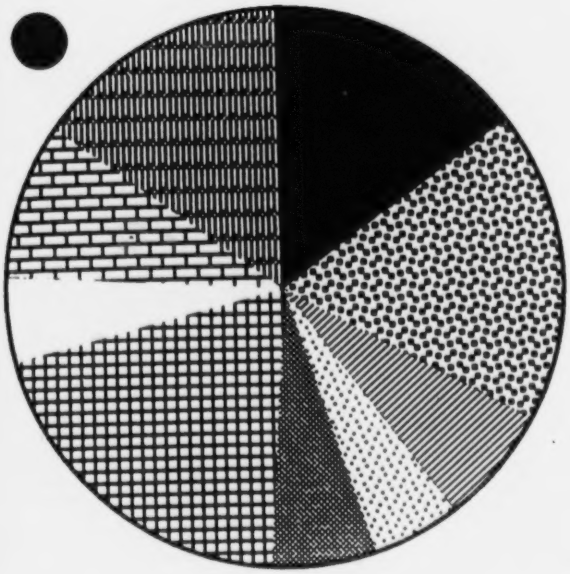
Follow-up Activities

1. Ask a PWA (person with AIDS) or the family member of a PWA to come to class to talk about economic realities of the illness.
2. Ask a local government official to come to class to discuss spending priorities regarding HIV disease.
3. Ask students to investigate and report on HIV resources available specifically for teens or young adults.
4. Review ways of preventing the spread of HIV infection.
5. Ask students to investigate and report on the issue of economic discrimination and PWAs.

Average Consumer Expenditures

(per year)

Name________________



■	Food	15.0%
▩	Shelter	18.0%
▨	Utilities, fuel & public service	7.0%
▒	House furnishings & operations	5.0%
▓	Apparel & services	6.0%
⊞	Transportation	20.0%
☐	Health care	5.0%
⊟	Personal insurance & pensions	9.0%
▦	All other*	15.0%

*Includes alcoholic beverages, entertainment, personal care services, reading, education, tobacco, miscellaneous expenditures, and cash contributions.

Source: U.S. Bureau of Labor Statistics, *Consumer Expenditure Survey. Results from 1986.*

Your name______________ Your career________________ Your salary______________

I. Calculate how much per year you would spend.

	According to average %	Average for your area
1. Food	______	______
2. Shelter	______	______
3. Utilities	______	______
4. Furnishings	______	______
5. Apparel	______	______
6. Transport.	______	______
7. Health care	______	______
8. Pers. Insur.	______	______
9. Other	______	______
Total	______	______

II. Consider the economic impact of HIV/AIDS.
Situation ______
A,B,C

Costs:	To You	To Insurance
Doctor Visits	______	______
Medications	______	______
Hospital	______	______
Other (specify):		
______________	______	______
______________	______	______
Totals:	______	______

How would HIV/AIDS affect you economically?

List 3 things you might do to cope financially:

Professions and Yearly Salaries

(Take-home, after taxes)

Accountant- $25,000

Alcohol & Drug Counselor- $16,500

Building Inspector- $21,000

Financial Manager- $23,000

Assistant Hotel Manager- $19,500

Fast Food Store Manager- $21,000

Electrical Engineer-$27,900

Civil Engineer- $28,000

Computer Programmer- $25,000

Teacher- $20,000

Cashier- $10,000

Travel agent-- $14,500

Bank Teller- $15,000

File clerk- $10,800

Mail Carrier- $21,000

Secretary- $18,000

Word Processor- $15,000

Police Officer- $22,000

Dental Assistant- $14,000

Librarian- $23,000

Childcare Worker- $10,500

Lawyer- $33,000

Management Trainee, Retail Sales- $23,000

General Business Administration- $23,000

Social Worker- $14,000

Newspaper Reporter- $13,800

Marketing Assistant- $22,000

Mechanic- $27,000

Carpenter- $23,000

Plumber- $23,000

Electrician- $23,000

Registered Nurse- $ 23,700

Advertising Sales Rep.- $ 21,000

Personnel Assistant- $22,600

Architect- $21,700

Sources: The Occupational Outlook Handbook, 1988-89; US News & World Report, Sept. 25, 1989

HIV Situations

Situation A

You are HIV infected. Your only symptom is a depressed T-cell count. Your doctor, a private physician, ($55 per visist), prescribes one capsule of AZT six times a day, (retail cost $1.65 each) and asks you to return for blood tests once a month ($45 each). You will also consult with the doctor and pay for each of these office visits. You have insurance which covers 80% of your medical bills after a $150 deductible, but none of the cost of AZT. After six months, your AZT prescription changes to eight times a day.

Situation B

You have developed PCP, *Pneumocystis carinii* pneumonia, one of the opportunistic infections that characterizes AIDS. You are hospitalized for 15 days, at a cost of $960 per day, and recovering at home for approximately two weeks after that. Your medication for your period of hospitalization totals $900. When you are discharged, you need a home-health care aide for three hours a day for eight days ($15 per hour), AZT has been prescribed for you six times a day (retail cost $1.65 per capsule), as well as other medication for three weeks (a total of $300) and you must return to the hospital for two outpatient visits ($105 per visit). You must take a cab each time ($15). You are unable to work for one month. You must also continue with AZT indefinitely (same dosage and cost as before) and another medication, which costs $220 per month, plus 1 visit to the outpatient clinc each month (same cost as before). You have no private insurance, but you do have Medicaid, which will pay 25% of your medical costs, except for AZT. You will be billed for the rest.

Situation C

You are HIV infected and showing symptoms. These include tiredness, swollen glands, and frequent illnesses. You are not always feeling well enough to work, and have used the sick, personal and vacation days your job qualifies you for. Each time you are absent, your pay is docked. In a six month period, you miss 12 days of work over your allotted leave time. In this same six month period, you have seen a private doctor nine times ($55 per visit), had three prescriptions for medications (totalling $150), had one outpatient visit at the hospital ($105), and been taking AZT (one capsule six times a day, $1.75 per capsule, retail). Your insurance covers 80% of your medical care and prescriptions, except for AZT. Then, because your attendance does not improve, you are fired, with the option of paying for your own insurance ($350 per month) for the next 18 months.

Dividing the Pie: Costs and Benefits of State Spending on HIV/AIDS

Introduction

How does HIV disease affect state and federal spending? With so many categories to fund, from research to medical treatment, to education, how is the money for HIV/AIDS divided? How might the needs of different cultural, age, income and gender groups affect spending decisions? A basic economic reality is that everyone wants a piece of the pie, and the pie is usually not big enough to go around. This exercise gives students experience in the basic skills of reading and interpreting charts and graphs, as well as the opportunity to experience some of the complexity of decision-making about expenditures that affect large numbers of people.

Overview of Lesson

This lesson includes three different activities, which may be done separately or in combination according to the ability levels of the students as well as the time available. In Activity A, students interpret two charts on state AIDS expenditures in 1988. In Activity B, they go on to examine data about who was affected by AIDS according to gender, race and sex, and what impact this data may have on spending allocations. In Activity C, students prepare their own proposal and rationale for the expenditure of additional state monies. (Activity C makes a good follow-up exercise to Activity A.)

Objectives

1. For students to develop skills in reading and interpreting charts and graphs.

2. For students to gain experience in making cost/benefit analyses.

3. For students to consider the different factors affecting allocations in state spending, and to create their own proposal and rationale for additonal spending.

4. For students to expand their knowledge of and sensitivity to HIV infection and related social issues.

5. For students to gain skills in working as part of a group.

Teacher Background

I. General Information

The growing incidence of HIV infection in populations that are older, of a different cultural or economic background, or a different sexual orientation than themselves may provide students with an opportunity to deny that HIV disease can affect them too. Public health educators are quick to point out that economic factors and not cultural or racial factors are responsible for the increased incidence of HIV disease in minority groups in the current wave of the epidemic. This is because traditionally, poorer economic groups have less access to health care, educational opportunities and social services than middle or upper class populations.

As students look at statistics about age and incidence of AIDS, it is important to remind them of the long incubation period of the virus. A person can be infected with the HIV virus and show no symptoms for many years (up to twelve in some cases). Therefore, an individual with AIDS who is currently 22 years old may have been infected with the virus at as young an age as 10.

Appendix G contains articles detailing the anticipated "third wave" of the HIV epidemic among teen-aged youth.

II. Preparation

1. Duplicate enough copies of the appropriate charts (see activities following) so that every student will have one.

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to organize, analyze, interpret and make generalizations about economic information based on relevant data.

2. Students will demonstrate the ability to make decisions about economic, social and political questions confronting them.

3. Students will gain insight into the political and social impact of economic decisions, and the economic impact of political and social decisions.

4. Students will develop their understanding of basic economic concepts.

The Activity Outline

Activity A

1. Introduce the activity.

2. Hand out Chart A, "Estimated Total AIDS Expenditures By Funding Source," and Chart B, "Estimated Total AIDS Expenditures 1988-1989."

3. Ask students to look first at Chart A and discuss the information presented there. Discussion questions might include:
   - What are the two main categories of spending? What is included under the category Personal Expenditures? Public Health Expenditures?
   - How do Personal Expenditures differ from Public Health expenditures? What products or services might be included in the Personal

Expenditures sub-categories? How might a citizen find out what products or services are included?
- Compare the total amounts of money spent on different forms of medical treatment. How much is spent on each area? What are the costs and benefits of this division of spending? (For example, $22,149,072 for AZT; or $3,024,149 for home care compared to $491,323,800 for inpatient treatment.) How would you find out what the issues are in order to make this kind of assessment?
- What services and/or products might be included when we talk about research, epidemiology and surveillance; HIV testing and counselling and prevention, education and training; administration, planning and regulation?
- What are the four sources of HIV/AIDS funding? Of these, which is the largest total source of funding? How much money does the federal government provide for personal and public health expenditures? How does that compare to the other funding sources, particularly to New York State?

4. Ask students to look at and discuss Chart B. Questions might include:
   - How were the HIV/AIDS monies spent in New York State in 1988 divided? Of the monies spent on personal expenditures, what percentage was on medical treatment, what percentage on social services, what percentage on medical support?
   - Considering the Personal Expenditures Chart, what costs and benefits do you see in assigning 86.2% of the monies to medical treatment?
   - Looking at the Public Health spending, what percentage of the total monies spent were spent in each category?
   - Considering the Public Health spending chart, what reasons can you give to support this division? What costs might this division of funds have? For example, 32.8% of Public Health spending was on research, while 23.8% was spent on prevention, education and counselling. AIDS is preventable, yet more money was spent on research than on prevention. What costs and benefits do you see in such a decision? How could you find out more about the issues involved in making such an assessment?

Follow-up Activity

1. Ask students to find out and write a description of both sides of an HIV/AIDS issue and the impact of each point of view on how funds are allocated. They should be sure to include their opinion.

Activity B

1. Introduce the activity.

2. Hand out Chart C, "Age Distribution of AIDS Cases," and Chart D, "AIDS Cases by Race and Sex." Ask students to report on what the charts tell them about the status of HIV disease in the United States and New York State. Discuss briefly with students the significance of identifying the

distribution of AIDS cases. Questions might include:

- Do different groups have different needs? For example, 12-15 year olds vs. 35 year olds? Women vs. men? The poor vs. the middle or upper class? Different cultural groups? What might some examples of this be?
- What impact might such knowledge have on economic decision-making?

4. Hand out or ask students to refer to Chart B. Ask students to describe what percentage of total spending was spent per category, and some of the reasons the pies may have been divided as they were. Considering some of the demographic information they have just seen, what costs or benefits can they see in the division of expenditures in the chart?

Follow-up Activity

1. See Activity C, below.

Activity C

1. Introduce the activity. Hand out Charts A through D (or E, "1988 NYS Expenditures") and discuss as necessary. (If the class is an advanced class, they may be required to interpret the charts on their own. In addition, Chart E details the New York State division of expenditures. An advanced class may find it challenging to consider, as a factor in their decisions, the way existing expenditures have been made.)

2. Ask the students to form groups of four. Tell them that each group works in the governor's budget office. The executive and legislative branches agree that more state monies must be spent to fight HIV/AIDS. Therefore, each group must submit to the governor a plan for spending an additional $950,000 on HIV/AIDS.

   The proposal must have the following elements:
   a. a completed pie chart following the format and categories of Chart E. (If they decide to spend in both areas, their proposal should include separate charts for Personal Expenditures and Public Health Expenditures.)
   b. a cost-benefit analysis of their recommendations
   c. a list of the criteria they used for making their recommendations.

3. Discuss with the class factors they might consider in making a cost benefit analysis. For example, who would be affected, positively and negatively, by their decisions to increase spending?

   They may want to consider or briefly research some of the issues raised in introductory discussions.

4. Ask students to share their proposals and rationales with the class.

Follow-up Activities

1. Invite a local government official to class to discuss local HIV/AIDS spending.

2. Ask each student to express their opinion about an aspect of HIV/AIDS spending in a letter to an elected official.

Chart A

Estimated Total AIDS Expenditures[1]
B[illegible] Funding Source
New York State, 1988 - 1989

	Federal	State	Local[1]	Other[2]	Total
Personal Expenditures - 1988					
Medical Treatment					
Inpatient	$147,888,464	$66,328,713	$66,328,713	$210,777,910	$491,323,800
Outpatient	10,892,993	5,446,497	5,446,497	11,730,916	33,516,903
Specialty Hospital	1,755,650	877,825	877,825	3,511,300	7,022,600
Long Term Care	752,139	601,710	150,428	167,142	1,671,419
Home Care	1,360,867	1,088,694	272,173	302,415	3,024,149
AZT	9,524,101	2,768,634	2,768,634	7,087,703	22,149,072
Total Medical Treatment	172,174,214	77,112,073	75,844,270	233,577,386	558,707,943
Medical Support[3]	3,337,040	33,140,200	780,000	Unknown	37,257,240
Social Services	2,057,300	34,780,000	15,049,000	Unknown	52,482,300
Total Personal Expenditures	**177,568,554**	**145,032,273**	**91,673,270**	**233,577,386**	**647,851,483**
Public Health Expenditures					
Prevention, Education & Training	14,438,172	8,800,000	6,556,000	Unknown	29,794,172
HIV Testing & Counseling, Individual, Blood Supply, Organs/Tissues	13,167,000	10,400,000	5,221,000	4,000,000	32,788,000
Epidemiology & Surveillance	6,370,000	3,500,000	1,104,000	Unknown	10,974,000
Administration, Planning & Regulation	2,171,000	15,880,000	1,104,000	Unknown	19,155,000
Research	45,257,299	0	0	Unknown	45,257,299
Total Public Health Expenditures	**81,403,471**	**38,580,000**	**13,985,000**	**4,000,000**	**137,968,471**
Total Expenditures	**$258,972,025**	**$183,612,273**	**$105,658,270**	**$237,577,386**	**$785,819,954**
Percent of Total	33	23	14	30	100

[1] Includes estimated New York City expenditures.

[2] Private expenditures for many AIDS services such as counseling, training, research, and education are impossible to estimate.

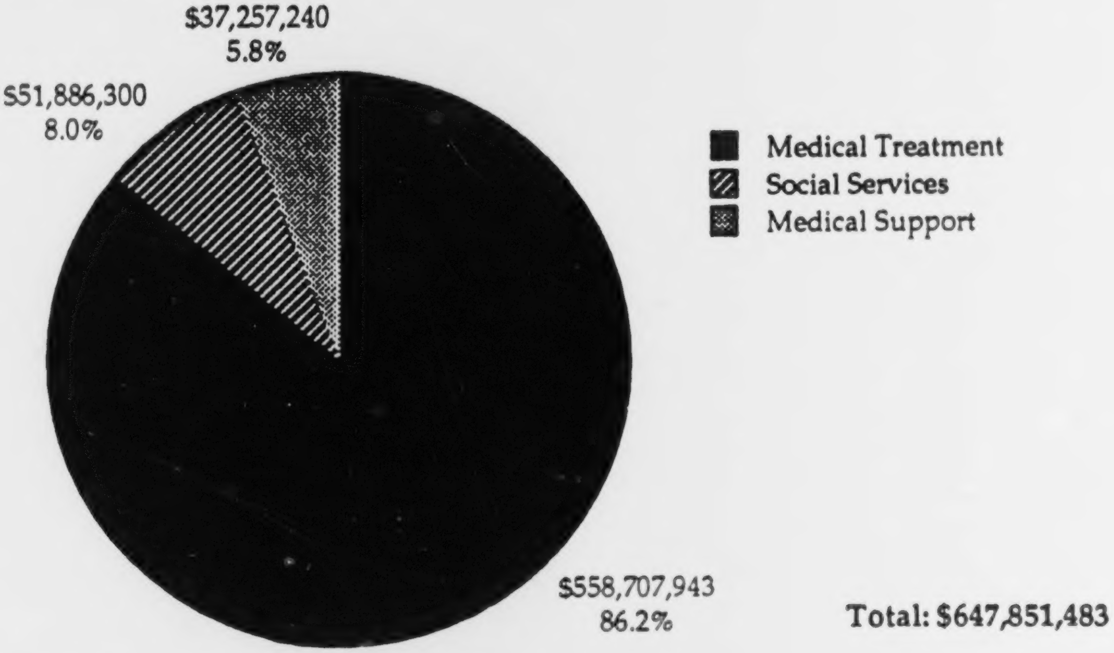
[3] Includes substance abuse treatment for persons with AIDS and mental health services for victims of AIDS and their families.

[1] Source: **AIDS in New York State Through 1988**, New York State [illegible]epartment of Public Health

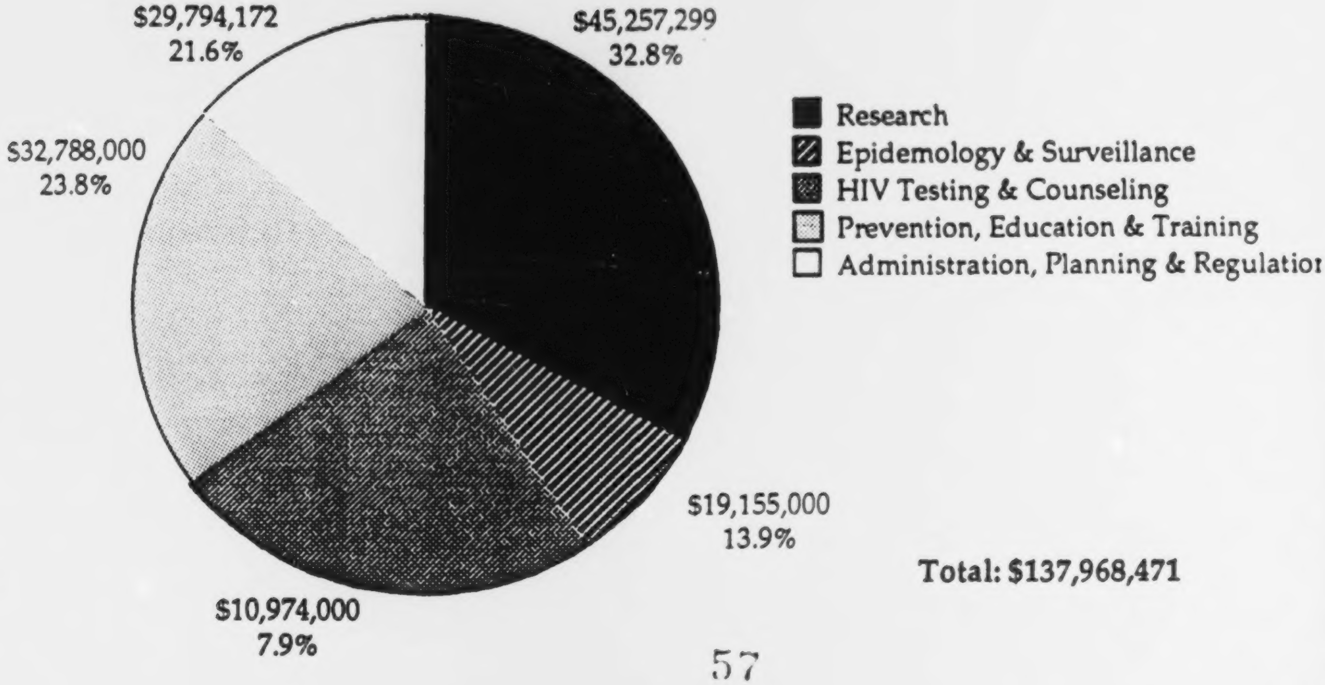
Chart B

Estimated Total AIDS Expenditures[1]
(State, Federal, Local, Private)
New York State, Fiscal Year 1988 - 1989

AIDS Personal Expenditures



AIDS Public Health Expenditures

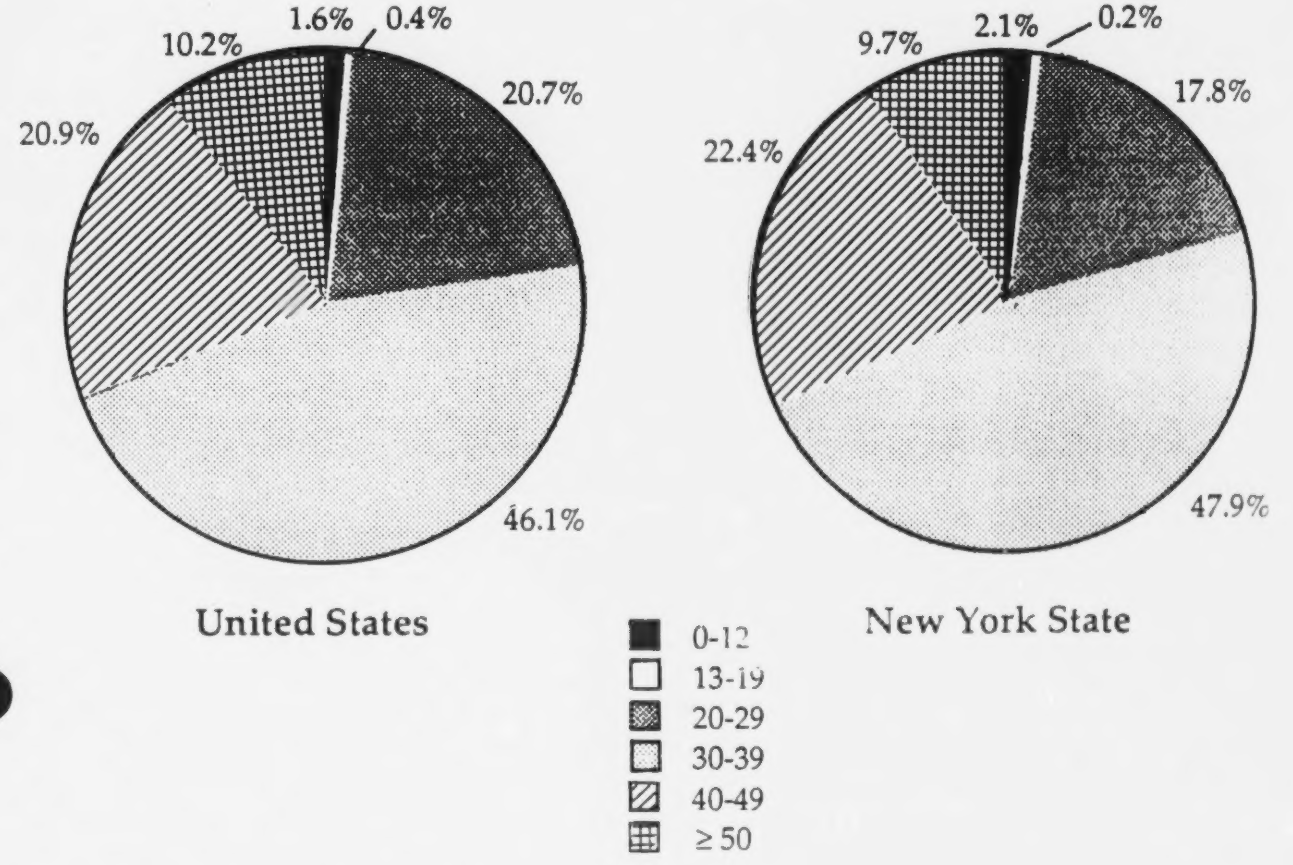


[1] Source: **AIDS in New York State Through 1988**. New York State Department of Public Health

Chart C

Age Distribution of AIDS Cases[1]

New York State and United States, December 31, 1988



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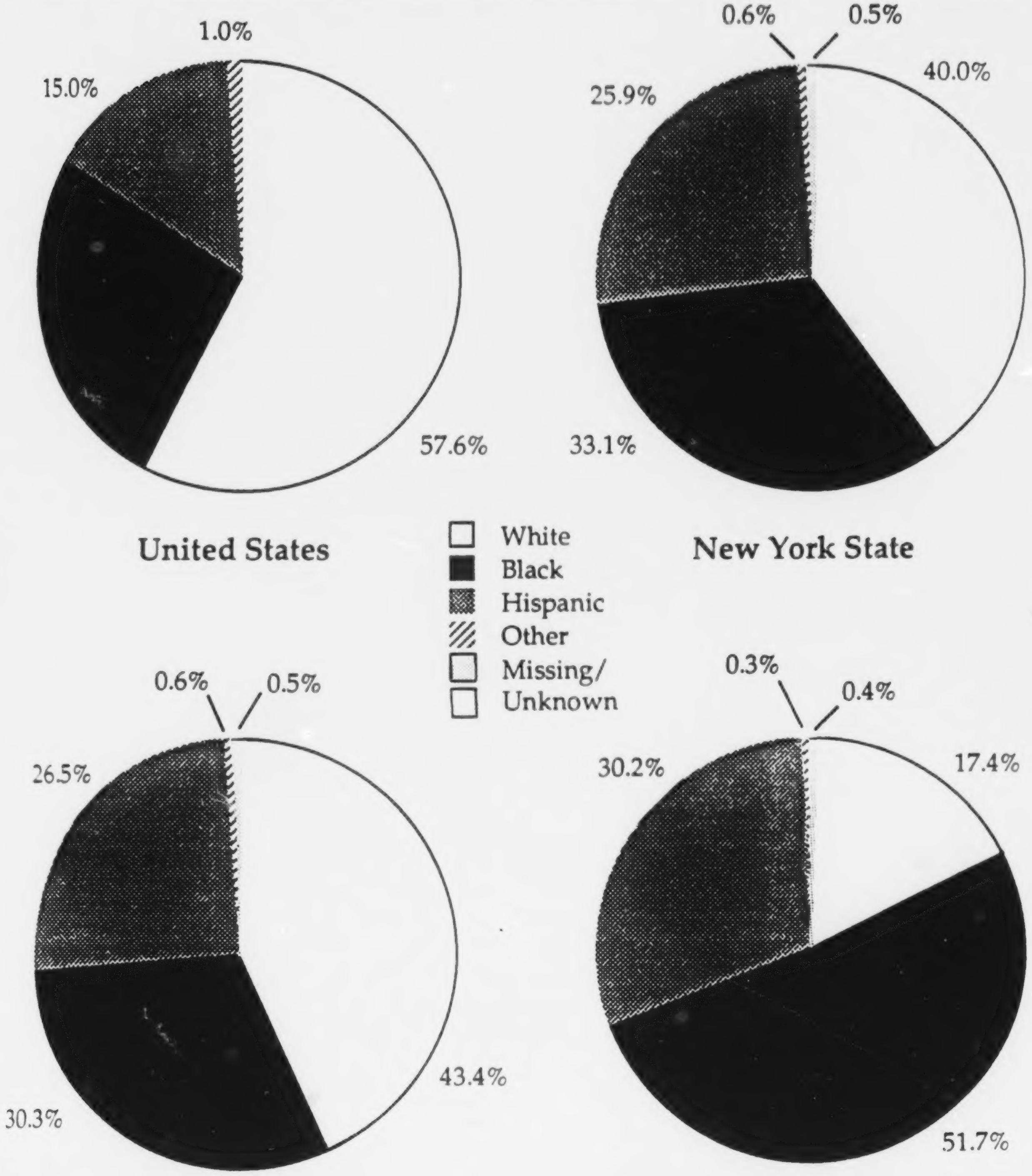
[1] Source: **AIDS in New York State Through 1988**, New York State Department of Public Health

Chart D

AIDS Cases by Race and Sex[1]

New York State and United States. December 31. 1988



United States

New York State

Males, New York State

Females, New York State

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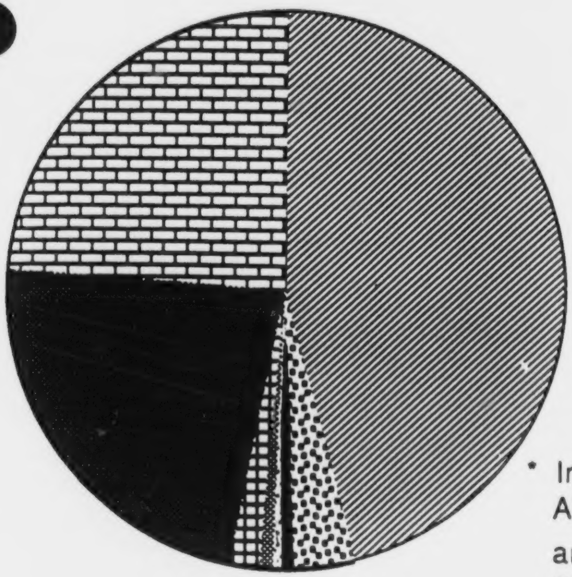
[1] Source: **AIDS in New York State Through 1988**. New York State Department of Public Health

Chart E

1988 NYS Expenditures- Personal Costs[1]



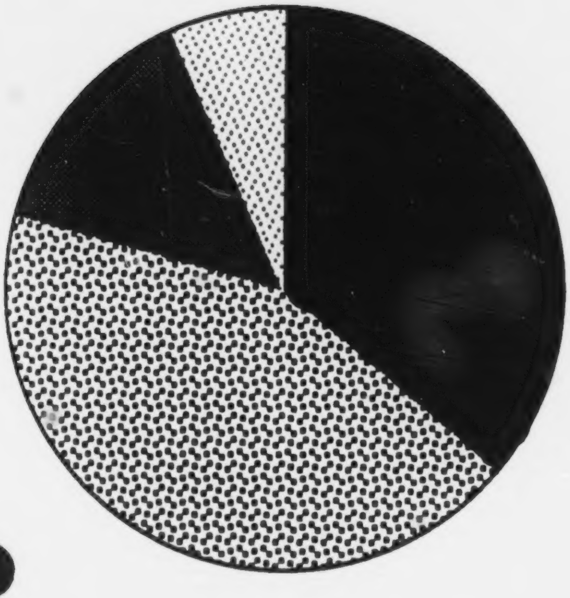
Medical Costs:

▨	Inpatient	45.7%
⊡	Outpatient	3.8%
■	Specialty Hospital	0.6%
⊡	Long Term Care	0.4%
▢	Home Care	0.8%
⊞	AZT	1.9%
▩	Medical Support*	22.9%
⊟	Social Services**	24.0%

* Includes substance abuse treatment for persons with AIDS and mental health services for victims of AIDS and their families.

Source: AIDS in New York StateThrough 1988, NYS Department of Public Health

1988 NYS Public Health Expenditures[1]



■	Prevention, Education & Training	36.2%
⊡	HIV Testing & Counseling	42.8%
■	Epidemiology & Surveillance	14.4%
⊡	Administration, Planning & Regulation	6.5%

Source: AIDS in New York StateThrough 1988, NYS Department of Public Health

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[1] Source: **AIDS in New York State Through 1988**, New York State Department of Public Health

AIDS and Federal Spending: How Much is Enough?

Introduction

Federal spending on HIV disease between 1982 and 1989 totalled $5.5 billion. In 1992, spending on the epidemic will reach an estimated $4.3 billion, or less than 2% of all 1992 federal health dollars. Many AIDS observers feel that despite the size of these numbers, the amounts spent on HIV/AIDS have been and continue to be inadequate, and that the allocation of resources between types of activities has also been inappropriate. Given the projections of increasing incidence of HIV infection into the 1990s, the question of how much is enough will become very real for students as they join the ranks of taxpayers after high school or college. This activity gives them the opportunity to practice economic thinking skills while exploring their own points of view on the issue.

Overview of the Lesson

Students examine data about federal AIDS spending between 1982 and 1989, then, working in small groups, take a stand on the issue of federal levels of AIDS spending, performing a general cost-benefit analysis to back up their point of view.

Objectives

1. For students to expand their understanding of the federal government as a producer and consumer of goods and services.
2. For students to develop the awareness that decisions concerning services provided by the government are ultimately decided by citizens (taxpayers), and to experience the process of economic decision-making.
3. For students to expand their knowledge of and sensitivity to HIV infection and related social issues, and to apply that knowledge to the formulation of an opinion about spending.
4. For students to develop their ability to read and use information in charts, tables and graphs.

Teacher Background

I. General Information

In a special article for the New England Journal of Medicine, June 15, 1989, Dr. William Winkenwerder et al. write:

> "Despite the large and growing level of spending, some observers argue that even higher levels are appropriate....

> There are several good reasons that such additional federal AIDS outlays may be supported. First, the magnitude of the epidemic may have been underestimated, and more dollars should be committed to avoid a worst-case outcome. Second, the burden of AIDS is not captured fairly in the mortality rates, because so many young people are affected, and the indirect costs in life years are great. In addition, comparisons with other major diseases, such as diabetes, may not be entirely fair, since HIV is an infectious disease and continues to spread. Furthermore, spending money on AIDS research will bring benefits for the understanding of other diseases, particularly cancer, because so much will be learned about cancer-causing viruses. Finally, the United States bears a responsibility to the world to develop a cure or vaccine, since 5 to 10 million people worldwide are presumed to be infected, many of them from economically stricken African nations."

Winkenwerder goes on to discuss the case for moderated future federal spending on AIDS. Reasons for this viewpoint include:

a. The lack of equity between AIDS spending and spending on cancer, heart disease, Alzheimer's disease, alcoholism, etc. when more than 63 million people have cardiovascular diseases, almost 30% of the population will eventually have cancer, and indirect costs of alcohol abuse totalled an estimated $117 billion in 1983 alone.
b. Spending money doesn't necessarily hasten the development of a cure. He uses cancer spending in the early 70's as a prime example of this.
c. Effective spending is difficult to achieve when budgets are being increased rapidly.

Allocation of funds, a separate issue, is also discussed. Winkenwerder notes that expenditures for research are double those for education and prevention, but that HIV infection is almost entirely preventable. He also notes that "in view of the clear link between intravenous drug use and HIV transmission, ... only a relatively small amount has been allocated to drug abuse treatment and prevention."

II. Preparation

1. Duplicate enough copies of the tables which follow and the student worksheet so that each student will have one.

2. You may wish to discuss briefly with students the impact public opinion has on economic decision-making. See **Participation in Government** background information on Points of View about the HIV/AIDS epidemic.

3. You may find it useful to review the information contained in the Teacher Background section "The Cost of HIV/AIDS", Pages 28-32.

4. Also, following this activity outline are brief descriptions of each of the main federal agencies involved in the fight against AIDS and the nature of their work. To provide your students with more specific information about the nature of federal expenditures, you may find it useful to duplicate and distribute these to them.

5. You may also wish to see pages 39-41, "Public Goods and Services", of the Social Studies Tentative Syllabus, *Economics and Economic Decision Making*.

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to organize, analyze, interpret and make generalizations about economic information based on relevant data.

2. Students will demonstrate the ability to make decisions about economic, social and political questions confronting them.

3. Students will gain insight into the political and social impact of economic decisions, and the economic impact of political and social decisions.

4. Students will develop their understanding of basic economic concepts.

The Activity Outline

1. Give students an overview of the activity.

2. Hand out the information charts and discuss them with the class as a whole. Discussion questions might include:
   - Chart A, "Federal Spending for AIDS According to Type of Activity": What years does this chart cover? During those years, what were the main categories of federal AIDS spending? How much money was spent for each category? Were there changes in spending from year to year in each category? Describe these changes. What factors might have influenced these changes? Why has the government undertaken to provide these services?
   - Chart B, "Federal AIDS Spending by Activity Type": What percent of federal AIDS spending was for research, education, prevention, etc.?
   - Chart C, "Federal Spending in Fiscal Year 1989": In 1989, how much money was spent on different diseases? How did spending on HIV and AIDS compare to spending on other diseases? Where did the money come from? Why is the federal government spending this money? How are decisions made about spending?
   - Chart D, "Gross Numbers of Deaths According to Disease": How many people died or are estimated to die of heart disease, cancer, cerebrovascular disease, etc. in 1984-1992? How do the numbers of of deaths from HIV-related disease compare? How does the amount of money spent on major diseases relate to the impact of the disease on the nation?

In addition to asking questions about the information the charts contain, the discussion should also reflect the complexity of some of the issues Winkenwerder discusses in his article (see Teacher Background). Additonal questions might include: Remember- your job is to evaluate the amount of money spent on AIDS and HIV-related disease. With that in mind, how would you compare the impact of major diseases (i.e., death rates) on the nation? Is this the only criteria that should be used in assessing AIDS spending? Is there anything about HIV infection that makes it different from other diseases; more of a threat? (You may find it useful to review information about HIV infection and AIDS. See Appendices A, B, C and G.)

Or, you might want to ask a student to act as a recorder and have the class brainstorm reasons for additional spending and reasons for moderated spending, raising issues as the brainstorming session progresses.

4. Ask the students to form groups of two to four. Their tasks in their group are:
   a. To decide if federal spending on HIV/AIDS should be increased or moderated.
   b. To defend their point of view in terms of the costs and benefits to society.
   c. To decide how federal spending should be allocated.
   (See Student Worksheet following.)

5. Depending on time available and the ability level of your class, you may wish to divide the questions between different groups rather than ask each group to report on all the questions. The groups could then report on their findings to the class as a whole. Another option is to ask the entire class to look at the issue of allocations, choose one of the types of activities the government supports, and prepare a cost-benefit analysis on the consequences of increased or moderated funding for that particular category.

Follow-up Activities

1. Ask students to write a letter to their Senator or Congressional Representative expressing their views about federal AIDS spending.

2. A variation on the above activity might be to assign several students to review the paper written by Winkenwerder and his colleagues. These students then role play Winkenwerder and his team at a press conference, presenting their ideas to the public in the form of both a written summary and discussion. The rest of the class plays the role of the press and asks questions. After the press conference, each student (member of the press) has to write a story as if it were to be published in the paper for which they're pretending to write.

Identification of Federal Programs[1]

Within the Department of Health and Human Services, the Public Health Service (PHS), is the principal health agency of the Federal Government. PHS administers a diverse array of programs concerned with the whole spectrum of health concerns reflected in the missions of its agencies. The PHS agencies and offices are responsible for the award, administration, and monitoring of these programs under a variety of legislative authorities, from discretionary project grant awards to block grants to States. They administer awards to a wide range of recipients including State and Local governments, educational institutions, hospitals, nonprofit organizations and, in certain programs, for-profit organizations.

PHS, which is under the direction of the Assistant Secretary for Health, is comprised of the Office of the Assistant Secretary for Health, is comprised of the Office of the Assistant Secretary for Health (OASH) and seven major agencies: the Agency for Toxic Substances and Disease Registry (ATSDR), the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), the Centers for Disease Control (CDC), the Food and Drug Administration (FDA), the Health Resources and Services Administration (HRSA), the Indian Health Service (IHS), and the National Institutes of Health (NIH). Most of the seven PHS agencies are responsible for major AIDS clients.

Grants and cooperative agreement programs are administered in OASH by the National Center for Health Services Research and Health Care Technology Assessment, the Office of Disease Prevention and Health Promotion, Office of Minority Health, Office of Population Affairs, Office of Resource Management and the President's Council on Physical Fitness and Sports. The National AIDS Program Office (NAPO) serves as the PHS focus in coordinating and integrating efforts to prevent and control AIDS and HIV infection.

ATSDR works closely with State, Local and Federal agencies to reduce or eliminate illness, disability, and death resulting from exposure of the public to toxic substances at spill and waste disposal sites. ATSDR assesses the extent of danger to the public health from the release of hazardous substances, conducts survey and screening programs to determine relationships between exposure and illness, and assists the Environmental Protection Agency in identifying hazardous waste substances to be regulated.

ADAMHA provides leadership and national focus for Federal efforts to reduce national health problems resulting from the abuse of alcohol and drugs and to foster improvements in the mental health of Americans through increase of knowledge and advancement of effective strategies to deal with health problems and issues associated with mental illness, alcohol abuse and alcoholism, and drug abuse. It conducts research, provides intravenous drug users and their partners with HIV-related information and treatment, and trains drug abuse counselors and health care workers in the psychosocial aspects of AIDS.

CDC is responsible for the national program of prevention and control of communicable and vector-borne diseases and noninfectious conditions, improving laboratory conditions, and assuring safe and healthful working conditions for all working people. The agency is responsible for HIV and AIDS case-surveillance activities, epidemiology studies, monitoring of trends, and public information and education.

FDA, the Nation's first consumer protection agency, is concerned with research and regulation in such areas as food, human and veterinary drugs (including drugs for orphan product development), biological products, cosmetics, medical devices radiation-emitting products and substances, poisons, pesticides and food additives. It is responsible for evaluating and approving all newly developed AIDS drugs and biologic agents, AIDS vaccines, and HIV diagnostic tests. This agency also regulated blood banks and attempts to ensure that the nation's blood supply is safe from HIV and that condoms and rubber gloves are effective.

HRSA provides leadership and direction to programs and activities designed to improve the health services for all citizens and to develop health care systems which are adequately financed, comprehensive, interrelated and responsive to the needs of individuals and families in all levels of society. It funds a broad range of AIDS programs relating to delivery of health services and patient care, including demonstration projects in 21 cities that examine models of appropriate, cost-effective community care for adults with AIDS.

IHS administers the principal Federal health programs for American Indians and Alaskan Natives. It provides quality, comprehensive, and accessible health services, increases opportunities for Indians to manage and operate their own health programs, and serves as an advocate of health issues for the Indian people. It is also involved in various AIDS education and prevention measures.

NIH seeks to improve the Nation's health by increasing knowledge related to health and disease through the conduct and support of research, research training, and biomedical communications. The National Institute of Health (16 institutes and nearly 800 workers) are involved in HIV research and education. The research efforts have primarily addressed the pathogenesis and clinical manifestations of HIV infection and the discovery and development of anti-HIV drugs.

Other programs in the Department of Health and Human Services:
The Health Care Financing Administration, which administers the Medicare and Medicaid programs, funds a sizable proportion of the cost of AIDS treatment. Medicaid is financed by both the State and Federal governments, and 51% of the AIDS costs are federally supported.

Two programs within the Social Security Administration Office provide cash assistance to persons with AIDS or HIV-related illness-Disability Insurance and Supplemental Security Income. Persons meeting the Center for Disease Control's definition of AIDS automatically qualify as disabled, since the definition is the same in both programs. Patients who do not meet this definition but have HIV-related illness are evaluated on a case-by-case basis.

Examples of other Federal Programs:
The Department of Veterans Affairs provides medical care to veterans with AIDS, who make up an estimated 7 percent of all patients with AIDS.

The expenditures of the Department of Defense are mostly for the HIV testing of active personnel and recruits.

The Occupational Safety and Health Administration inspects work places to ensure that the guidelines of the Centers for Disease Control are being followed, to minimize the risk of spreading AIDS and other diseases.

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1. Source The National AIDS Program Office, U.S. Public Health Service

A. Federal Spending for AIDS According to Type of Activity

	1982	1983	1984	1985	1986	1987	1988	1989	TOTAL	PERCENT
				millions of dollars[*]						
Research										
Public Health Service	3	22	57	83	164	317	607	815	2067	
Defense Department	0	0	0	0	38	22	12	27	98	
Department of Veterans Affairs	0	0	2	3	3	6	8	14	34	
Other	0	0	0	0	0	1	1	1	2	
Subtotal	3	22	59	86	204	345	626	856	2201	40
Education and prevention										
Public Health Service	2	7	4	25	55	145	321	388	947	
Defense Department	0	0	0	0	18	25	26	26	94	
Other	0	0	0	0	0	2	8	37	47	
Subtotal	2	7	4	25	73	172	354	450	1088	20
Medical										
Medicaid (federal share)[†]	0	10	30	70	130	200	330	490	1260	
Department of Veterans Affairs	0	5	5	8	20	47	74	103	261	
Public Health Service	0	0	0	0	16	41	29	87	173	
Defense Department	0	0	0	0	23	27	15	15	80	
Medicare[†]	0	0	0	5	10	15	30	55	115	
Other	0	0	0	0	1	1	1	2	4	
Subtotal	0	15	35	83	199	331	480	751	1893	34
Cash assistance										
Disability Insurance[†]	0	0	5	10	25	40	70	110	260	
Supplemental Security Income	0	0	1	3	8	11	18	28	69	
Subtotal	0	0	6	13	33	51	88	138	329	6
Grand total	6	44	104	207	509	899	1548	2195	5511	100

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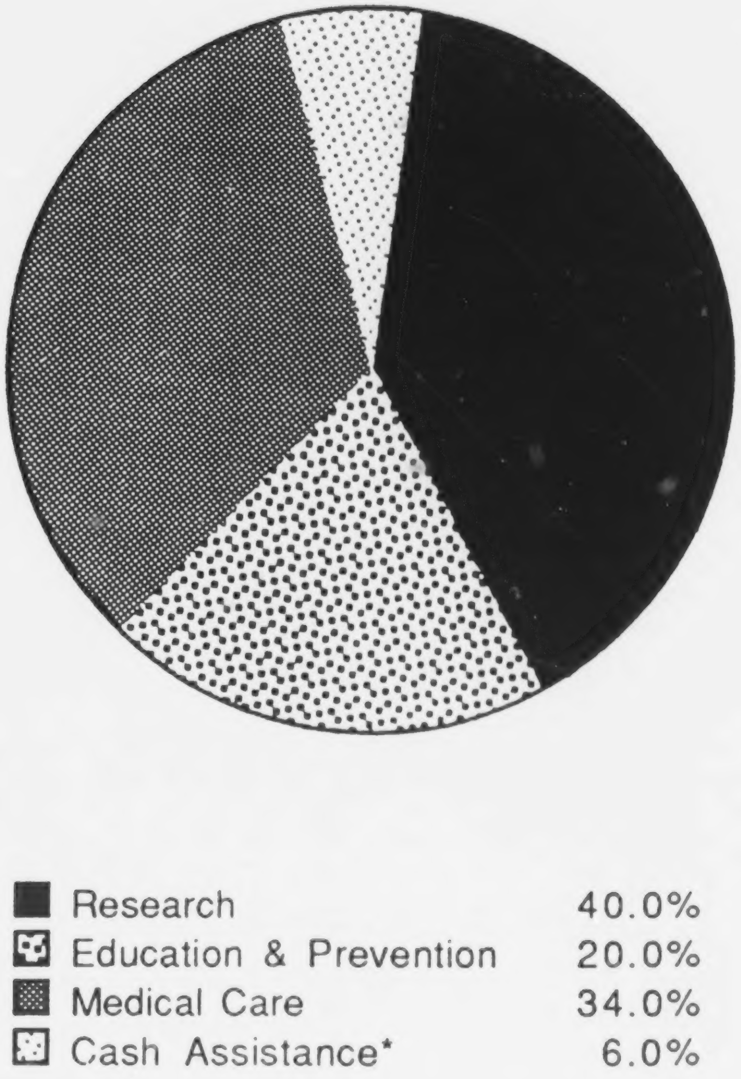
[*] *Dollar amounts are rounded to nearest million. Because of rounding, columns may not add to totals shown.*

[†] *Estimates on these lines have been rounded to the nearest $5 million by actuaries at the Health Care Financing Administration and the Social Security Administration.*

Source: Winkenwerder et al; "Federal Spending for Illness Caused by the Human Immunodeficiency Virus"; New England Journal of Medicine; June 15, 1989; pp 1598-1603.

B. Federal AIDS Spending by Activity Type



Source: Winkenwerder et al; "Federal Spending for Illness Caused by the Human Immunodeficiency Virus"; New England Journal of Medicine; June 15, 1989; pp 1598-1603.

*Disability Insurance and Supplemental Security Income

C. Federal Spending in Fiscal Year 1989 for Research on, Education About, and Prevention of Major Diseases

	millions of dollars
Cancer[*]	1449
AIDS and HIV[†]	1306
Heart disease[‡]	1008
Diabetes[§]	267
Stroke and Hypertension[§]	182
Alzheimer's disease[§]	127

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[*] *Total National Cancer Institute appropriation for 1989, minus the amount devoted to AIDS-related activities. This figure may underestimate the true total federal expenditure (complete data are not available).*

[†] *From Table 2.*

[‡] *Total National Heart, Lung, and Blood Institute appropriations for 1989, minus the amount devoted to AIDS-related activities. This figure may underestimate the total federal expenditure.*

[§] *From Public Health Service estimates of 1989 obligations, as reported to the Congress in "Justification of Appropriations Estimates for Committee on Appropriations, Fiscal Year 1990." Vol. VIII and IX. This figure may underestimate the total federal expenditure.*

Source: Winkenwerder et al; "Federal Spending for Illness Caused by the Human Immunodeficiency Virus"; New England Journal of Medicine; June 15, 1989; pp 1598-1603.

D. Gross Numbers of Deaths According to Disease in the United States

CALENDAR YEAR	HEART DISEASE	CANCER	CEREBRO-VASCULAR DISEASE	COPD[†] AND ALLIED CONDITIONS	HIV-RELATED ILLNESS
Actual					
1984	765,114	453,492	154,327	69,100	2,922
1985	771,169	461,563	153,050	74,662	5,875
1986	768,350	465,980	147,790	75,420	10,324
Estimated					
1987	773,021	477,248	144,530	79,727	16,369
1988	775,341	485,901	141,325	83,194	24,750
1989	777,626	494,422	138,169	86,609	34,388
1990	779,868	502,782	135,072	89,959	44,644
1991	782,057	510,945	132,049	93,230	55,142
1992	784,185	518,882	129,109	96,411	65,402

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[*] *Data on all diseases except HIV-related illness were provided by the National Center for Health Statistics for 1984 and 1985 and were prepared in preliminary form by the National Center on Health Statistics for 1986, with use of a 10 percent national sample. Estimates for 1987 through 1992 were projected by a simple linear model with the assistance of the Division of Technical Support, Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. Adjusted actual and projected data on HIV-related illness were provided by the Statistics and Data Management Branch, AIDS Program, Centers for Disease Control.*

[†] *COPD denotes chronic obstructive pulmonary disease.*

Source: Winkenwerder et al; "Federal Spending for Illness Caused by the Human Immunodeficiency Virus"; New England Journal of Medicine; June 15, 1989; pp 1598-1603.

Student Worksheet: Federal Spending and AIDS

Names: ____

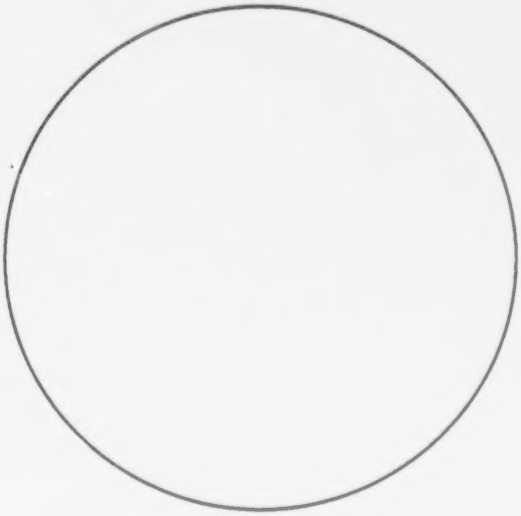
1. Should federal spending on HIV/AIDS be increased?

2. List the costs and benefits of your point of view:
(Please consider the costs and benefits on the level of the person with AIDS, the health care system, and the society. Use another sheet of paper if you need more room.)

COSTS	BENEFITS

3. Summarize your reasons in a general statement:

4. a. How should federal spending be allocated? Complete the pie chart below. Please include the categories medical care, research, education and prevention, cash assistance.



b. What costs and benefits does this type of allocation have to society ?

COSTS	BENEFITS

Participation in Government

Participation in Government

AIDS Policy Questions and the Local School Board

Introduction

Knowing where one stands as an individual on a particular issue is an important start to being an effective citizen. However, the ability to sift through many different viewpoints to form real public policy, and to understand the actual workings of public or governmental agencies may seem far removed from the day-to-day lives of most seniors in high school. This unit offers students a creative opportunity to participate in deciding the direction a specific public policy question should take.

Overview of the Activity

Within the context of a realistic role play, students examine an AIDS policy question through field and academic research, then use the information they gather to hold a mock hearing. Finally, they develop and articulate their own points of view on the same question.

The Role Play Situation

As part of an on-going state mandate for a school district to have a responsible and comprehensive policy about AIDS, the Superintendent of Schools has formed a special advisory committee to make recommendations to him/her and the school board about specific AIDS-related questions.

The committee members were chosen because they represent different segments of the community, and it is essential that the community's diverse viewpoints be reflected in any recommendations brought to the Board for adoption. The advisory committee has decided that the most effective way to make a recommendation is to hold an open hearing, where a variety of community groups will have the opportunity to express their viewpoints.

The current question the advisory committee must decide on is this:

To help prevent the spread of HIV infection to teenagers in this community, should latex condoms be made available to students in the public high school, either for sale in bathroom vending machines, or free of charge through the nurse's office?

The Activities

1. Students will be divided into groups of four to five members, with each group representing a particular section of the community. The advisory committee will also be selected, and may be larger than four members.

2. The students must decide on the position their community group is likely to have on the issue, and the attitudes about HIV infection that most likely inform that point of view. The students must also decide on additional beliefs or issues (i.e., moral, religious, civil) that would

influence the position their group is taking.

3. To gain a larger perspective on the question and issues at hand, students must interview 3 to 5 peers or adults to gain exposure to views that might affect their position, and find and read a number of current articles about HIV infection.

4. Each student group will then write a 1-2 page position paper which sets forth the group's point of view on the question, explains its rationale for that point of view, and addresses the main opposing arguments. They will present this to the advisory committee in a time-limited oral presentation (the hearing).

5. The advisory committee will be responsible for hearing the different groups, keeping track of the arguments at hand, and writing a final paper explaining to the School Superintendent and Board their consensus recommendation and the rationale for it.

6. After the hearing, each student will write a position paper expressing his/her own personal point of view on the same question, the rationale for it, and addressing the points of view in opposition. They will also identify three things they could do as individuals to impact an AIDS public policy question.

Objectives

1. For students to participate in the process of public policy formation.

2. For students to recognize a number of public policy approaches to the AIDS epidemic, and their underlying moral, religious, and civil points of view.

3. For students to develop and defend a point of view not necessarily their own about a specific AIDS policy question.

4. For students to develop and express a personal point of view regarding one aspect of the AIDS crisis, and an understanding of the actions they as individuals can take to influence policy formation regarding AIDS.

5. For students to gain exposure to a variety of community resources and learn the skill of reaching out to them.

6. For students to develop the skills of research, data analysis, working with others, and persuasive expression of issues, opinions and information.

Tie-ins to the New York State Social Studies Curriculum

1. Students will find, organize, process and communicate accurate social

studies information and ideas.

2. Students will identify and investigate issues, taking and supporting their positions persuasively.

3. Students will demonstrate the ability to work with others in identifying a goal, formulating a plan, and evaluating the results and procedures used.

4. Students will develop the ability to determine and understand their rights and responsibilities and decide how they should be exercised as contributing citizens.

Teacher Background

The incidence of HIV infection in teenage youth is expected to rise dramatically in the next five to ten years, to the point that some researchers are predicting that teenage infection may be "third wave" of the AIDS epidemic (incidence among homosexual men is now seen as the first wave; incidence among minority IV drug users as the second).

New York Times writer Gina Kolata reports, "Teen-agers who have become infected with the AIDS virus said that they were not concerned at the time they were infected and gave no thought to safe sex practices until it was too late." The number of reported AIDS cases in teens has increased by 40% between 1987 and 1989. Altered behaviors due to drug and alcohol use are often a factor in infection. As well, increasing numbers of teenagers are sexually active at earlier ages, many have multiple partners, and few use condoms. These are the perfect conditions for the virus to spread.

In the U.S., over half the states require some form of education about HIV infection. In light of the emerging statistics, some health professionals are calling for more AIDS education, including instruction in the use of condoms. Several Canadian school districts have gone even further, installing condom machines in several high schools in Toronto, and distributing condoms free of charge in Ottawa.

For a more complete discussion of the rising rates of HIV infection in teenage youth, see "AIDS Is Spreading in Teen-Agers, A New Trend Alarming to Experts" *The New York Times*, October 8, 1989, as well as "The AIDS Threat to Teenagers" in *U.S. News & World Report*, October 23, 1989. Both articles may be found in Appendix G of this sourcebook. Another useful resource is produced by the National Issues Forum. Entitled *Coping With AIDS: The Public Response to the Epidemic*, it is available at the Regional Health Education Center Resource Library.

The Teaching Schedule

Day One

1. Introduce the unit as one in which students will have a chance to actively explore a public policy issue about HIV infection and AIDS by participating in a role play or mock hearing. Give a general description of the purpose and nature of the activities, the requirements for credit, and the schedule at a glance so students may begin to plan their research time. You may wish to save a description of the actual question until the following day so student attention may be focused on the following activity.

2. Ask students to take out two pieces of paper. On one sheet of paper, ask them to take one minute to fill in the blank in this statement: AIDS is __________. They should not write their names on the paper. As soon as they've done this, ask them to pass these sheets forward.

3. Tell the students that before they can explore the diversity of viewpoints that exist about HIV infection and AIDS, especially in the realm of public policy, they must begin with a picture of their own knowledge, including questions, biases or concerns. Ask students to listen to the responses, and to comment briefly on them if they choose.

4. Next, pass out Handout A and ask students to complete it. They will be writing down three things they know to be true about HIV infection/AIDS, three things they think they may be true, and three questions they may have about HIV/AIDS.

5. On several large pieces of paper, ask someone to record the facts and questions the class has. Then, ask the class to review the Facts sheet item by item and identify any myth that might be masquerading as fact. If there is a question, mark it on the sheet. You may want to take the time to correct misconceptions or errors in their knowledge about the disease.

   Let the class know that in the course of their study, they will be discovering more about the facts and myths of HIV infection, and how the presence of myths and fears can affect public policy formation as readily as the presence of fact. Also let them know that they'll have the chance to find the answers to their questions about HIV infection and AIDS. Keep the sheets posted throughout the unit so that students may refer to them.

6. Pass out Student Handout B . Ask the students to read this for homework and summarize in a list the most important facts they glean from the reading. This will be collected in the next class. Pass out Handout C (following this outline) and ask students to read Viewpoints 1 and 2 for discussion in the next class.

Day 2

1. Ask students to review the sheets they posted yesterday and check for accuracy of the information based on their homework reading.

2. Discuss Viewpoints 1 and 2 from the previous homework assignment. Make sure students understand that these are two of four viewpoints that the class will discuss, and that they will be using these as a basis for forming both their personal and role play positions on the policy question. Be sure to clarify that formulating a position for the hearing will demand that students address not only reasons supporting their position, but also arguments against it.

   Discussion points to include: the policy's goal, it's strategy, arguments for the policy, arguments against it, differences and similarities between the viewpoints. Next, ask the students to brainstorm 5-10 ideas a person who supports each viewpoint would believe about AIDS, PWAs (persons with AIDS), and efforts to control the spread of HIV infection. After the students have completed their lists, be sure to have students identify each statement as "fact" or "opinion". (This may be done as a large group or in small groups, with the results shared after completion.)

3. Briefly describe the ground rules to be followed during the hearing, including amount of time each group will be expected to speak; required preparation and assignments to be completed; and class schedule.

4. Hand out a description of the question the school board advisory committee must address.

5. Ask students to pick a slip of paper from a hat to determine the committee they'll serve on. Make sure students understand it doesn't necessarily have to reflect their personal point of view (and hopefully won't!); that the purpose of the activity is to give them a chance to develop an understanding of a variety of viewpoints.

   If there is time, an important question to raise with students is what makes a community group worthy of note? What process will the class use in deciding which groups should be included? The committees should be reflective of the students' community and might include such groups as:
   - Religious leaders (Christian, Jewish, and/or other)
   - Leaders from different cultural groups
   - Public Health officials
   - Representatives of community reproductive education groups (i.e., Planned Parenthood)
   - Parents strongly supportive of the proposal
   - Parents strongly opposed to the proposal
   - Representatives from local AIDS support programs, or AIDS activist groups

- Persons with AIDS (PWAs) or their families
- Representatives from the ACLU
- Teachers and administrators of the high school
- Students supportive of the proposal
- Students opposed to the proposal
- The advisory board itself must also be represented

The number of students in the class and their ability to work in small groups, the nature of your school community, and the level of diversity you wish to introduce to the discussion should determine the number and kind of groups you include. Make sure there are enough slips of paper for everyone in the class, and that the variety of slips ensure a good balance in the numbers of students in each group.

6. Review the requirements for credit with the students. If time remains, ask them to get into their small groups and begin a discussion on the position they think their group might have.

7. For homework: Ask students to read Viewpoints 3 & 4 and prepare for discussion in the next class.

Day 3

1. Discuss Viewpoints 3 & 4 with the students. Ask them to begin thinking about the viewpoints their role play group might hold and why, as well as some of the opposing arguments the group might need to address in the role play.

2. Introduce the interviewing activity. Students should seek out 1 to 3 community members who hold the positions the students represent in the role play, and 1 to 3 members who might oppose the view the students represent. Ask the class who and how they might contact individuals who can help them. These interviews may be done in person or over the telephone; in either case, students will need to hear a description of how to prepare for a phone call, how to make an effective call, and how to have an effective interview.

   Then, ask the class to brainstorm examples of questions they might ask these individuals about their views on HIV infection and the role of schools in HIV prevention. Discuss how the students can incorporate the information in the formation of their viewpoints.

3. Give students the rest of the period to develop questions and brainstorm people to call. They should get teacher approval of their questions and resource lists before they progress.

Note: An excellent alternative to this interviewing activity is to have students create and execute a public opinion survey. The National Issues Forum has developed an excellent survey in their unit *Coping With AIDS: The Public*

Response to the Epidemic. (Available at the Regional Health Education Center Reference Library, Putnam/Northern Westchester BOCES, Yorktown Heights NY.)

Day 4

1. Ask students to comment on their progress in question and resource development. Encourage students to participate in offering suggestions to each other in the face of difficulties or problems.
2. Ask the students to break into their small groups. For the rest of the period, they'll be involved in planning. Due at the end of the period: a sheet of paper listing their group's name, group members, community members they'll attempt to interview, questions they would like to ask, and initial brainstorming on the position their group will take on the role play question.
3. Homework can be assessed while students are working in their groups, or can be passed in at the end of class.
4. Homework: Ask students to begin interviewing. All interviews are due on Day 6. Discuss with students the format you wish them to use in presenting the final interview. Options range from notes on what was said, an exact transcription, etc. Begin searching for a specific number of current articles about HIV infection and AIDS. (Article summaries will be due on Day 7.)

Day 5

1. Use today as in-class work day, a library day, or a panel discussion day, depending on the needs of the class.

   The purpose of an in-class work day is to give students the opportunity to continue planning and discussing the development of their case.

   The purpose of a library day is to give students the opportunity to begin to search for current information about HIV infection and AIDS. The articles they search for should be used to help them gain more information about the disease, as well as to help them develop their group position on the role play question. Students should be reminded that they'll need to complete a summary of the articles they read, as well as an assessment of how they might use the information to develop their argument.

   A panel discussion will need to be set up in advance, and can be planned by teacher or students. The purpose of such a discussion is to help students gain a broader awareness of the different points of view about handling the HIV/AIDS epidemic in their own community. Panelists can be asked in advance to respond to specific questions about how the epidemic should be handled, or their role in the fight against HIV/AIDS. Try to include individuals who reflect a variety of viewpoints, and after the discussion, ask students to write a brief summary of what each speaker said, the viewpoint(s) the speaker represented, their reaction to each speaker, what they learned, and how they might use this information in developing their group's argument.

Day 6

1. Begin with a brief check-in on the status of each student's article search. Students may wish to offer each other ideas for resources, or share articles.

2. If the students heard the panel discussion the previous day, ask them to comment briefly on it, and to hand in their homework.

3. Ask students to take out their completed interviews. Discuss the results with the students. Did any trends in viewpoints about the AIDS crisis emerge within the individuals they interviewed? How might they use this information in planning their small group's argument?

4. Ask students to meet in small groups to compare results of their interviews and determine how they might use this information in the formation of their arguments. In addition, the advisory committee should choose members to share timekeeping and facilitation duties during the hearing.

5. For homework: Have students write up summaries of the articles read and assess how the information might be used in building the group's argument. (Student Handout D, following.)

Day 7

1. Ask students to meet in their small groups to finalize plans for their hearing presentation. While they meet, article write-ups can be assessed.

2. Ask the advisory group to announce the order in which they'd like to hear the presentations of the community groups. (Note: No matter what the order, all position papers are due at the start of class, Day 8.)

3. For homework: Ask students to complete the group position paper for the hearing, which will begin during the next class. (Student Handout E.)You may wish to ask each student to complete their view of the group's position in addition to having the group complete one final paper.

Days 8 & 9

1. Set up the classroom to resemble a hearing, with tables or desks for the advisory committee and the presenting community group at the front of

the room.

2. Review the ground rules for the hearing. These could include the amount of time each group has to present its case, how much time the committee members will have for questioning the group that's testifying, etc. (These could be posted for future reference.)

3. Turn the hearing over to the advisory committee, asking the designated facilitator to begin by clearly stating the question under examination. The timekeeper should keep track of how long each group speaks, and notify the facilitator when a minute remains. The facilitator takes charge of moving through the agenda the advisory group has set.

4. While each group makes its presentation, each student should be noting the major position and supporting arguments of the group. Students may hand their notes in to be checked, or simply use them in preparing their final position paper.

5. For homework: The advisory committee must decide on what it will recommend to the Superintendent and prepare its rationale, being sure to address the major arguments of the hearing. Other students should begin preparing their individual position papers on the same question.

Day 10

1. The advisory committee may need to meet in order to finalize its position. While it does so, the rest of the class can work on their individual position papers.

2. Ask the committee to announce its decision.

3. Debrief the exercise with the students. Discussion questions may include what they learned about HIV infection/AIDS, trends, public policy formation, etc.

4. Ask the students to complete a feedback/self-evaluation form (see Student Handout F.) This may be completed for homework if not enough class time remains. Also for homework: completion of the individual position paper, to be handed in on Day 11. This paper should also include a list of at least three things students think they could do to influence some aspect of the formation of public policy about the AIDS crisis.

Comments

1. The same kind of activity can be done using a different question. For example, the advisory group to a college or university board of chancellors might have to make a recommendation about whether HIV infected students should be housed in separate dormitories.

Follow-up Activities

1. Ask students to discuss the activities they've brainstormed about how to influence public policy about HIV/AIDS, then complete one of the activities they've come up with.

2. Ask students to organize an AIDS educational exhibit to be displayed in the cafeteria and staffed by students during lunch time.

3. Ask students to perform community service activities for a cause that reflects their own point of view about handling the epidemic.

4. Invite a local legislator into the class to discuss AIDS policy-making.

STUDENT HANDOUT A

Name______________________________ Class______________ Date_________

Three things I know about AIDS are:

1.

2.

3.

Three facts I think are correct about AIDS are:

1.

2.

3.

Three questions I have about AIDS are:

1.

2.

3.

STUDENT HANDOUT B

U.S.A.
HISTORY OF HIV/AIDS EPIDEMIC

1981	June	5 cases 5 deaths	CDC Publishes 5 cases of death due to PCP from Los Angeles; CDC defines this outbreak as an epidemic
1981	July 4	29 cases 29 deaths	CDC reports 24 cases of death from Kaposi's Sarcoma from NYC and San Francisco
1981	July 29	108 cases 43 deaths	Physicians report 108 cases of either PCP or KS to CDC
1981	December		Dr. Michael Gottlieb publishes article in the New England Journal of Medicine regarding cases of PCP in gay men
1982	February	251 cases 99 deaths	CDC begins to use the term GRID (Gay Related Immune Deficiency) to describe new disease which is rapidly spreading
1982	March	285 cases	CDC reporting cases of GRID from 17 states 5 European nations are also reporting cases of GRID
1982	June/July		Dr. Rubinstein is treating 11 babies with immune deficiency disease Bronx, NY
		413 cases 155 deaths	First Hemophiliac case of PCP reported to CDC; Denver, Colorado. Term AIDS is suggested as name for this new disease because of hemophiliac cases 34 cases among Haitian men are reported to CDC
1982	August	625 cases 258 death	Dan Rather of CBS nightly news does first media story on AIDS First transfusion case of AIDS in NYC
1982	November		33 States reporting cases of AIDS
1983	January	1,641 cases 644 death	Discovery of virus LAV believed to cause AIDS announced by the Pasteur Institute in France First USA Government funding to do research on AIDS at NIH

1983	April		AIDS story appears on cover of Newsweek
1983	December	3,064 cases 1,292 deaths	Gay Men's Health Crisis is only educational program with a prevention focus for AIDS
1984	April	3,899 cases 1,702 deaths	Public announcement of discovery of virus HTLVIII believed to cause AIDS by Dr. Gallo at NIH Ryan White is diagnosed with AIDS
1984	September		80 cases of AIDS due to transfusion reported to CDC
1985	January	8,057 cases 3,863 deaths	50 cases of AIDS due to heterosexual transmission reported to CDC
1985	March		AIDS virus antibody test begins to be used to test the blood supply
1985	July	11,271 cases 5,641 deaths	News that Rock Hudson is being treated for complication of AIDS is released to the press. Media attention focuses on AIDS epidemic.
1986	January-March		Cases of AIDS reported to the World Health Organization from 51 countries European countries mount educational programs on AIDS prevention
1986	October	25,650 cases 14,345 deaths	Surgeon General C. Everett Koop submits report to Reagan administration regarding the AIDS epidemic and needs for research, programs etc.
1987	February		HIV is agreed on as name for virus responsible for AIDS
1987	March	33,482 cases 19,394 deaths	President Reagan makes his first speech which mentions AIDS
1987	May		President Reagan appoints a National Commission to study HIV/AIDS epidemic
1988	January	51,916 cases 28,965 deaths	Public education begins to be mounted in the USA as a means to stopping spread of HIV. "Understanding AIDS" is mailed to

			every household in US from Department of Health and Human Service.
1988	May		Central New York AIDS Regional Training Center opens
1988	June	65,780 cases 37,195 deaths	Presidential Commission on HIV infection issues its report with over 200 recommendations to deal with the epidemic
1988	July		CDC adds Persistent Generalized Lymphadenopathy (PGL) to its' AIDS case definition
1988	August		First 5-day Turnkey Trainer workshop is presented by the Central New York AIDS Regional Training Center (8 TKT workshops will be done during the 1988-89 school year)
1988	December		Mortality rate of AIDS cases is 56%
1989	January	82,764 cases 46,344 death	New York State AIDS case numbers reach 20,000
1989	March	53,000 death	Deaths from AIDS surpass the total number of military personnel lost in Vietnam
1989	April	97,193 cases 57,205 deaths	AIDS becomes the 9th leading cause of death in children ages 0-4 years
1989	June		International Conference on AIDS is held in Montreal World AIDS cases reported to WHO surpass 150,000 cases In USA heterosexual transmission cases = 5% of all cases
1989	September	109,167 cases 64,849 deaths	AIDS becomes the leading cause of death for women of childbearing age in NYC; female AIDS cases in USA = 10,587 cases
1989	December		AIDS case numbers are increasing at rate of 3000 cases per month
1990	January	121,645 cases 73,520 deaths	CDC begins reporting teen (13-19 year old) and young adult (20-24 year old) AIDS case numbers separately Teens = 479 cases Young Adult = 5,233 cases
1990	March	128,319 cases 79,250 deaths	New York Post reports 1 in 4 New York City males age 25-44 are HIV infected

STUDENT HANDOUT C

COPING WITH HIV INFECTION & AIDS

"The entire AIDS epidemic, every aspect of it, is an ongoing workshop in public policy," commented an HIV/AIDS researcher for the federal Department of Public Health recently. From the national level to the personal, policy issues raised by the AIDS epidemic affect us all. The issue might be how much money the federal government should allocate for the care of persons with AIDS (PWAs), research or education; whether a potential vaccine should be tested on human subjects, and if so, who; or whether a landlord should be able to evict the family of a PWA. The key question is how do we, as a nation, cope with the many faces of HIV infection and AIDS? And, most urgently, what can we do to stop HIV infection from spreading?

The process of forming public policy is never easy. In the case of the epidemic of HIV infection that is sweeping the country and the globe, it is often excruciating. Human lives are at stake, the lives of those who have been exposed to the disease as well as those who have not. Also at issue are basic civil and moral liberties. Misconceptions about the virus frequently create an atmosphere of fear and prejudice that make discussion of policy questions even more complicated.

The National Issues Forum has focused on two general questions which must be addressed in considering how to most effectively stop the spread of HIV infection:

-What public policy best meets the needs of people infected with HIV, as well as people not infected?
-What kind of public policy most effectively balances the moral and civil liberties threatened by the spread of HIV infection?

They have identified four viewpoints on these questions:

Viewpoint 1: There is no way to come to grips with the epidemic without focusing on the behavior that spreads the disease. We must put the responsibility where it belongs, on the individuals whose actions continue to spread the disease.

A basic belief behind this viewpoint is that the epidemic of HIV infection and AIDS arose when values and moral standards declined and individuals began to act in ways that were both morally wrong and dangerous. For example, engaging in promiscuity, i.e. sex outside of marriage, sodomy, and IV drug use. The epidemic will be contained only when individuals change the way they behave. In order for this to happen, society must take a renewed stand for proper morals, and do whatever is necessary to discourage dangerous and risky behavior.

Viewpoint 2: Compassion for those with AIDS should not get in the way of taking firm measures to ensure the disease spreads no farther. Everything possible should be done to protect the rest of society from exposure to the virus.

A major belief of those who hold this point of view is that no government or public agency can do much to change the way individuals with HIV infection will behave. Therefore, the major emphasis the government should take in the battle against the spread of HIV infection is on the protection of the rest of society from exposure to the virus, no matter what the cost financially or otherwise (i.e., in terms of basic rights). This might include such actions as mandatory testing of high risk groups, mandatory tracing of the sexual or needle-sharing partners of infected individuals, or in some cases, even quarantine of the HIV-infected individual or PWA (person with AIDS).

Viewpoint 3: Our concern should not take the form of demands that leaders "do something" but rather that they do the "right" thing. This requires clear thinking, not quick fixes, to find practical measures to fight the epidemic.

Advocates of this point of view believe that fear can lead us to make decisions and put policies into effect which are inefficient and expensive. With a common-sense approach to fighting the epidemic, we will find the most effective ways to prevent the disease from spreading. In terms of prevention, education is the tool that will enable us to reach the most people at the least cost, particularly straightforward education of high risk groups. That could include access to and information about everything from how to use condoms to how to keep IV drug needles clean. In terms of other expenses, such as health care, we need to be seeking solutions that will help the people who need it most, for example, individuals most at risk for becoming infected, as well as people who are already HIV positive or have AIDS.

Viewpoint 4: A contagion of fear has lead to a wave of public hysteria and to blatant discrimination against those with AIDS. The important thing is not to lose our heads over AIDS, nor to sacrifice our civil liberties to it.

According to this viewpoint, fear is our biggest enemy in fighting the war against HIV infection. This country was founded on basic civil liberties, and no epidemic should be powerful enough to sway us from holding to these essential human rights. Right now, the priorities in dealing with HIV infection should be to protect those infected from discrimination, to protect the rights of all citizens from infringement, to put our attention towards caring for those infected, and to do everything we can to find a cure, even if we have to spend more money to do so. In this society, sick people have a right to care, and society has a duty to provide it, just as veterans from a war have come to expect the care and protection of the government they served in battle.

STUDENT HANDOUT D
ARTICLE REVIEW FORM

Name______________________________ Class______________ Date__________

Article Title ____

Author ____

Source ____

Summary:

What points of view about handling the AIDS epidemic are reflected in this article?

(Please turn over)

How does the information discussed in this article relate to the presentation your group is preparing?

STUDENT HANDOUT E
GROUP POSITION PAPER WORKSHEET

Name____________________________ **Class**____________ **Date**_________

Group Name____

Group Members____

1. Based on your reading, what point of view do you think your group would hold about confronting the HIV/AIDS epidemic?

2. What facts, opinions, moral/religious or civil beliefs might inform this point of view about confronting the HIV/AIDS epidemic?

3. What position do you think your group would take on the question before the advisory committe?

4. What underlying moral or religious beliefs might inform this position?

(Please turn over)

5. What underlying beliefs or concerns about civil liberties might inform this position?

6. What underlying beliefs about society might inform this position and point of view?

7. What additional issues might the question raise for your group?

8. What main opposing views does your group need to examine and address in its presentation?

STUDENT HANDOUT F
Self-Evaluation

Name________________________________
Class__________________ Date__________

1. What committee did you serve on?

2. a. How satisfied were you with your committee's end product?

1____7
very dissatisfied — very satisfied

b. What factors contributed to your level of satisfaction?

3. a. How satisfied were you with your level of participation in your committee?

1____7
very dissatisfied — very satisfied

b. Please describe your contributions to the group:

c. What could you have done to help the group function more effectively?

4. a. How satisfied were you with the quality and content of your individual paper?

1____7
very dissatisfied — very satisfied

b. What factors contributed to your level of satisfaction?

c. What might you have done to be more satisfied?

Coping With HIV: A Vision for Your Community

Introduction

Participation in government often takes the form of individuals within a community organizing themselves to create change in a particular area of their community's life. However, many students don't see themselves as valued members of a community, nor are they perceived as such, so they often can't understand why they should bother paying the slightest bit of attention to the adult world around them. Given a specific purpose and tasks which call them to interact, students are often empowered to change these perceptions and behaviors.

Overview of the Lesson

Students hear a panel of experts discuss their community's policies and priorities regarding the HIV epidemic. They investigate and report on the resources and services available, then write recommendations for improving the community's response.

Objectives

1. For students to expand their knowledge and awareness of HIV infection and related social issues.

2. For students to participate in investigating resources in their community, identifying gaps and making proposals for change.

3. For students to develop skills in communication, information-gathering, and working as a group.

4. For students to have the experience of interacting with adults from the community.

Teacher Background

I. This activity provides students with a natural introduction to performing HIV-related community service work.

II. Preparation

1. Arrange for participants in a panel discussion. (See Activity Outline for details.)
2. Prepare any materials needed for an HIV review/overview. (Appendices A, B and G may be helpful.)
3. Decide how you will divide the class for the investigation section (see Activity Outline following for details), and duplicate enough student investigation forms for the class.
4. Arrange to have phone books available for use in class.
5. Duplicate "Information Sources" from Appendix F for use in class.

Tie-ins to the New York State Social Studies Curriculum

1. Students will find, organize, process and communicate accurate social studies information and ideas.

2. Students will identify and investigate issues, taking and supporting their positions persuasively.

3. Students will demonstrate the ability to work with others in identifying a goal, formulating a plan, and evaluating the results and procedures used.

4. Students will develop the ability to determine and understand their rights and responsibilities and decide how they should be exercised as contributing citizens.

Activity Outline

Day 1

1. Introduce unit, giving brief overview of objectives and activities and assignments. You might want to post a large calendar and record due dates of homework and activities as you assign them.

2. Review information about HIV infection with students. This might take one of several forms:
   - a brainstorming session where each student writes down three things they think they know about HIV/AIDS and three questions they have, gives that information to a class recorder who adds it to a poster at the front of the room, and the class then discusses the lists they've compiled
   - a lecture and question and answer period lecture done by health or social studies teacher
   - a guest lecturer from community
   - student reading and discussion in class

   It's essential that students' misconceptions about the disease are dispelled and that everyone is working with the same information base.

Day 2

1. Arrange for a speaker or panel of speakers to come to class to discuss the needs, public policies or goals that exist in the community about treating, preventing, and researching HIV infection and disease. The panel could include a public health official, a care-giver or administrator from a clinic or hospital treating HIV-infected and persons with AIDS (PWAs), a local, state or county legislator, an AIDS activist, a PWA and/or family member, a minority community leader, a drug treatment program worker, etc.

   Arrange this well before the day of the panel, making sure your panelists understand the general and specific questions or issues you want them to address. Ideally, they will provide an overview of the local needs, policies and services of each of the major areas of the HIV/AIDS epidemic, and a brief sense of how these fit into the state and federal picture. Your questions or areas of interest might also depend on the personality, interests and needs of your class. Some examples of specific issues and general categories may include:

- Needs, policies, or goals the community has about HIV prevention in teenagers (education & prevention)
- Needs, policies, or goals for treating HIV-infected persons of various income levels (medical & other care)
- Needs, policies, or goals for economic assistance for HIV-infected persons and PWAs (persons with AIDS), including prescription drug programs and cash support (economic support)
- Needs of, or policies and goals regarding different cultural, gender or age groups within the community (all categories)

In discussing their particular area, your speakers might also mention names of existing resources in the community.

Ask students to take notes; they'll be following up on what they hear.

Day 3

1. Ask students to respond briefly to the speakers from the day before. What did they learn? What questions do they have?

2. List on the board the major areas of focus within the spectrum of issues raised by the HIV/AIDS epidemic: education and prevention, medical care, research, and economic assistance. Ask students to summarize the major points raised by the speakers category by category.

3. Each student then selects a category that interests him/her; they'll be investigating exactly what services and resources exist within that area in the community and reporting back to the class.

   Or, you may want to assign students randomly (ask students to count off by threes and assign the ones to one category, etc., or ask each student to draw a category name from a hat.) Note: unless your community is close to a university or medical college, the research category probably will not apply. In that case, to have groups of about the same size, you may wish to make "Other care" a category of its own.

4. Once students know what their general category is, explain exactly what you want them to find out, and by when. Hand out the student investigation forms to each group. (Again, this can be altered to meet the specific needs or interests of the class.) If you've duplicated a form on the blackboard or a piece of poster paper, it may make the form easier to discuss with the class.

5. Students should meet in groups and equally divide responsibilities between themselves.

   For homework: Ask students to come in to class with a brainstorm list of at least three people or places they can contact for information.

Day 4

1. Ask the students to share their brainstormed lists of where to find the organization names and phone numbers which might be of use to them. (Resources include the local phone book, particularly any listings of government services, and Appendix F, "Books and Information Sources.")

   Role playing a telephone call to an organization will also prove helpful; most students have never had to do this before. Include in your role play discussion: clarifying the purpose of your call, the importance of having questions prepared and written beforehand; finding the right person to talk to; explaining who you are and your reason for calling; the importance of the image you project; and use of language and appearance (if you're going in for information).

2. Either give students the opportunity to gather phone numbers or ideas for contacts, or ask them to read a current article about an aspect of the HIV/AIDS epidemic (perhaps something from a local newspaper) and discuss.

Succeeding Days

1. The amount of time you give students to find their information and what you decide to do in class during that period of time will vary depending on a number of factors, for example, the number of students in the class and how many items each student is researching, what else you need to cover in class during that time, etc.

   Some teachers will choose to ask students to read and respond briefly to a number of articles about the HIV/AIDS epidemic. These might be related to a particular theme, such as the spread of HIV infection among teenagers. See Appendix G for articles and information about this subject. Resources for in-class reading on other topics include: The SIRS Critical Issues series, *The AIDS Crisis*, as well as current periodicals. No matter what is planned for a particular class, be sure to allot 5 to 15 minutes at the start of each class to field questions or troubleshoot problems students may be encountering.

2. Regarding due dates for the information: you may choose to have all groups bring their information on the same day, or to assign each group to a different day. Each group should have a specific amount of time, eg., 15 to 25 minutes, to report to the class on exactly what they found.

3. Once all groups have reported on their findings, ask them to meet to discuss the last section of the project: what needs are not being addressed within their category, what services do they think the community needs, and why do they think these would be important? For homework, ask each student to use the discussion of the group as a basis for writing their own response to these questions.

4. Discuss student responses in class, and ask students to brainstorm who in the community could do something about their proposals.

Follow-up Activities

1. Ask students to write a letter to a local official (perhaps one of the participants from their panel discussion) about HIV-related services or needs they believe are important and why.

2. Ask students to identify a project they'd like to take on to make a positive change in an HIV-related situation they've discovered through this activity. (This might be a period of community service, an educational project for an elementary or middle school, or a letter-writing campaign to the local newspaper.)

3. For extra credit, ask students to visit an HIV-related service organization and report on what they find. (Note- students may need parental permission to do so.)

Student Investigation of Community Resources **Page 1**

Name________________________________

General Area: Medical Care

Type of Service	Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?	Specific services offered?	Needs unmet or services they wish they could give?
•Public hospitals			
•Private hospitals			
•Clinics			

Student Investigation of Community Resources Page 2

Name________________________________

General Area: Medical Care

Type of Service	**Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?**	**Specific services offered?**	**Needs unmet or services they wish they could give?**
•Private doctors			
•Hospices			
•Home nursing care			
•Prescription drug programs			

Student Investigation of Community Resources Page 3

Name______________________________

General Area: Support Services

Type of Service	**Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?**	**Specific services offered?**	**Needs unmet or services they wish they could give?**
•Counselling & social services advocacy for the individual			
•Counselling & social services advocacy for the family			
•Spiritual assistance			
•Household help: cooking, shopping, cleaning, dressing, other			

Student Investigation of Community Resources Page 4

Name__________________________________

General Area: Education & Prevention

Type of Service	Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?	Specific services offered?	Needs unmet or services they wish they could give?
In Schools •Elementary			
•Junior High			
•Senior High			

Student Investigation of Community Resources Page 5

Name______________________________

General Area: Education & Prevention

Type of Service	Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?	Specific services offered?	Needs unmet or services they wish they could give?
In the community:			
•IVDUs (intravenous drug users)			
•Homosexuals or bi-sexuals			
•Teenagers			

Student Investigation of Community Resources page 6

Name________________________________

General Area: Education & Prevention

Type of Service	Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?	Specific services offered?	Needs unmet or services they wish they could give?
Cultural groups •Latinos			
•African Americans			
•Native Americans			
•Asian Americans			
•White			

Student Investigation of Community Resources Page 7

Name________________________________

General Area: Economic Assistance

Type of Service	Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?	Specific services offered?	Needs unmet or services they wish they could give?
For Medical Care •Medicaid			
•Medicare			
•Private insurance			
•Cash Asistance for rent, food, transportation, etc.			
•Social Security Insurance			
•Disability Insurance			

Name____________________________________

General Area: Economic Assistance

Type of Service	Who is served? (eg., age, cultural group or risk behavior) Any criteria to be met to qualify for service? Costs?	Specific services offered?	Needs unmet or services they wish they could give?
Other cash assistance programs:			
Prescription drug funding			

Psychology

Psychology

The Headband Game: Dealing with Stereotypes

Introduction

Cliques, stereotypes, labels-- call it what you will, the phenomenon of fitting in is an acutely adolescent experience. Despite most teens' strenuous objections to being labelled, labelling others is often second nature to them. The action of stereotyping others also provides teens with a strong defense against people or phenomenon which are different from or threatening to them. AIDS is a phenomenon which most people, teens and adults alike, would prefer to keep at an arm's distance. This activity attempts to break down some of that distance and promote new awarenesses, in a very experiential way.

Overview of the Lesson

During this two-period activity, students first explore the general dynamics of stereotyping or labelling through a group game. Then, they apply their observations and conclusions about stereotyping to the specific circumstance of the AIDS crisis, exploring their own attitudes about persons with AIDS.

Objectives

1. For students to experience and discuss the impact of stereotyping on their lives.

2. For students to begin to understand that HIV infection and AIDS don't just happen to people who fit a particular stereotype, but can infect anyone who engages in high-risk behaviors.

3. For students to apply the observations they make about themselves and the impact of stereotyping, to persons with AIDS.

4. For students to become aware of the roles played by fear, hatred and self-protection in the formation of stereotypes.

5. For students to explore and move beyond their own stereotypes of persons with AIDS (PWAs), ideally to a more compassionate perspective.

Teacher Background

This activity could also be used as an example in a unit on perception or as part of the Erickson unit on identity vs. role confusion.

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to empathize.
2. Students will note and evaluate the characteristics and behaviors of others before making judgements that might be influenced by stereotypes.
3. Students will demonstrate the ability to form or acquire a set of standards and apply them to the evaluation of assumptions, sources, evidence, reasoning and arguments (critical thinking) and to the evaluation of beliefs, qualities and behaviors (valuing).
4. Students will demonstrtae the ability to make appropriate decisions, to identify and solve problems effectively and to initiate appropriate action.

The Activity Plan

Day 1

1. Prepare enough paper headbands with adjectives printed on them so that every member of the class will have one. The adjectives should be printed large enough for others to be able to read. Use adjectives with positive and negative connotations for the students. Do not let the students see the adjectives on the headbands in advance. Examples include: popular, intelligent, leader, complainer, boring, unpopular, stupid, problem-solver, good friend, trouble-maker, liar, etc. It's possible to use an adjective more than once.
2. Divide the class into groups of no more than 18. Ask the groups to pull their chairs into separate circles.
3. Explain that each small group will be having a discussion about a specific subject for a set period of time. During the discussion, each student will wear a headband with an adjective printed on it. While the discussion is taking place, the students should respond not to each other as fellow classmates, but as much as possible to the label on the headband of each student without revealing what the adjective is.

   For example, if Mario is wearing the headband "popular", when he makes a comment in the discussion, people should respond to him as if he were popular. Students should be aware of their attitudes towards the different labels, as well as to the responses of other students towards them.
4. The subject should be one which will encourage a real discussion among the students; it may be student or teacher selected. The most effective topics are often controversial. In a group needing more direction, you may want to ask students to come up with a specific number of recommendations or opinions in response to a question. Be sure the time

120

limit for the discussion and the discussion topic is clear before putting headbands on the students. Example: If a parent thinks his child is using drugs, should he search her room? Name ten things a parent should and should not do if s/he is concerned.

5. Tape a headband on each student. Be sensitive to who receives the headbands with the negative connotations.

6. Tell the students when to begin and when to end.

7. Stand back and watch while they participate in this game. It may take a while for the groups to get beyond the giggling stage, but they will.

8. At the end of the allotted time, ask the students to report on what they observed about the reactions and behaviors in the group. How did they respond to others? What kind of response did they notice towards themselves? How did that affect their willingness to participate in the discussion? They may want to speculate on what their headband said. They should not remove their headbands until they have completed this discussion.

9. Once they have commented on their observations and read their headbands, ask the students how this game relates to their daily experience with labelling or stereotyping. Some questions for discussion could include:
    - -How does labelling or stereotyping occur in our school? Is it a factor in people relating to one another?
    - -Is stereotyping positive or negative?
    - -What impact does stereotyping have on the person being labelled? On the person doing the labelling?
    - -What motives might people have for stereotyping?

10. For homework, ask students to observe one or two situations where stereotyping might be at work and be prepared to comment on them in class the following day.

Day 2

1. Open class with a brief discussion on what students observed about stereotyping.

2. Ask the students to take out a piece of paper and pen. Then, place an empty chair in the front of the room. Tell the students that it is the chair of a person who wears a headband that says "Person With AIDS." (You might have a headband prepared which you drape over the chair as you say this.) Ask them to write down the first reactions they have when they see or hear of that headband. Then, ask them also to imagine what the person would be like who would wear that headband-- interests, appearance, age, etc.

3. Ask the students to share their reactions. You might have a recorder post them on large sheets of paper in front of the room so the responses can be easily seen by all.

4. When the students have completed their responses, ask them to look over the list and describe what they observe. Discussion questions might include the following: Are the associations with the PWA (person with AIDS) headband largely negative or positive? What assumptions or attitudes seem to be reflected in the associations? What emotions might be motivating them? Considering the responses they see, how might they feel if they themselves were wearing that headband, or if a friend or family member were?

5. Talk with the students about some of the objectives of this exercise. You may also wish to discuss briefly the skyrocketing rates of sexually transmitted diseases, including HIV infection, among teenagers and the false sense of safety many may have about the likelihood of contracting the infection because of their ages, economic or family backgrounds, etc.

6. For homework, ask students to find and report on the experience of a real PWA either through an interview, book, or current periodical. Their own reactions to the person should be included. These might be printed up anonymously and distributed within the class or shared in oral reports.

   For a short-term assignment, ask students to write a one page reaction to the question how might they feel if they themselves were wearing the headband "PWA", or if a friend or family member were?

Follow-up Activities

1. Invite a person with AIDS (PWA) and/or their family to class to talk about their experiences with the disease.

Heroes in the Era of AIDS: A Discussion

Introduction

In times of crisis, the awareness of heroes often plays a significant role in a person's ability to cope effectively with the situation. The HIV epidemic of the past and future decades is no exception, but it is a crisis teens and adults alike shirk from acknowledging. An invisible crisis produces few heroes. Likewise, a society caught up in the glamour of success, fame and fortune makes it doubly difficult for young people to identify lasting heroes with values and behaviors which promote health. As one social studies teacher observed "I tell my kids that winners stand on the shoulders of a nation, but a nation stands on the shoulders of its heroes." This activity tries to provide students with the opportunity to find real heroes in the battle against HIV infection.

Overview of the Lesson

A discussion of the qualities of heroes and the importance of their presence in our lives leads students to role play their hero's attitudes about drug use and HIV prevention. They then can consider how, as students and teenagers, they can become heroes in their own lives regarding HIV infection.

Objectives

1. For students to explore the concept of "hero" and its impact on their lives.

2. For students to identify positive role models in their lives and communities, and think about behaviors their heroes might endorse.

3. For students to expand their awareness of HIV infection and the actions they themselves can take to prevent it.

Teacher Background

1. The SIRS Critical Issue Series *The AIDS Crisis* includes a number of articles about individuals involved in the fight against HIV/AIDS, among them researchers, care-givers, and persons with AIDS (PWAs). It may provide a good resource in the search for individuals who demonstrate qualities of heroic behavior.

2. Former Surgeon-General C. Everett Koop has been widely acclaimed by health professionals for his unflinching stance on (and almost fearless willingness to "rock the boat" about) what's needed to halt the spread of the HIV/AIDS epidemic. Teenage AIDS patient Ryan White also received much media coverage. Current periodicals would be a good resource for profiles on Dr. Koop and Ryan White. Students should also be encouraged

to seek out profiles on Latino, African-American, Asian-American and Native American leaders.

3. We frequently think of "heroes" as individuals with national or international reputations-- rock stars, movie stars, politicians. And many of them are! But it's important for students to become aware of and identify heroes not just by reputations, but also by their actions. Local communities are the sources of many unsung heroes of the battle against HIV. These include public health workers, educators, medical care-givers, activists, etc. Encourage students to define "hero" by using behavioral criteria, and give them the opportunity to find individuals who meet that criteria.

4. During this activity, students may bring up information about HIV infection and AIDS which is not accurate. Be prepared to provide or review information about how HIV is transmitted.

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to form or acquire a set of standards and apply them to the evaluation of assumptions, sources, evidence, reasoning and arguments (critical thinking) and to the evaluation of beliefs, qualities and behaviors (valuing).

2. Students will demonstrate the ability to get, organize, process and communicate accurate social studies information and ideas.

3. Students will demonstrate the ability to work with others in identifying a goal, formulating a plan, dividing tasks and carrying the plan out.

4. Students will demonstrate the ability to identify and investigate issues, generate hyptheses, and take and support positions persuasively.

The Activity Plan

1. Introduce the activity.

2. Ask students to find a partner for a brief brainstorming exercise. They should have a pen and piece of paper to record their thoughts. Give them several minutes to brainstorm the names of all the heroes they, their friends, or that teens in general have in their lives. If they have trouble understanding the word hero, substitute the phrase "people you look up to or admire." (Giving them the option to discuss teens in general may be less threatening than asking them to share who they personally admire.)

3. Ask each pair to share their list with the class. Have a recorder note the responses on several large sheets of paper at the front of the room.

4. When the sharing is complete, ask the students to describe the

characteristics of the people (or institutions) listed. (You might also ask what made the students choose these people.) Have the recorder list these on a separate sheet of paper.

5. Ask students to describe the behaviors and attitudes of heroes, and have a recorder list these on a sheet of paper. Questions for discussion might include:
   - What are the differences, if any, between the actions of a hero and someone who's out for themselves?
   - What attitudes towards other people do heroes have? How do they demonstrate these?
   - What attitudes do they have about society--are they anti-social or committed to the development of society through some larger cause?
   - How do heroes respond to criticism or put-downs from others?
   - How do heroes feel about themselves? Do they respect themselves, care about themselves, or ignore themselves? How can you tell?
   - What makes us look up to someone-- popularity, level of success or fame, willingness to go along with the crowd, willingness to stand up for something they believe in, niceness, etc.?

6. Ask students to think about one specific hero they have in their lives. Then, remind students that one of the most significant things about heroes is how they help us cope with society-wide crises. Remind students that we are in the midst of a huge crisis, the HIV/AIDS epidemic, and ask students to think about what their hero would have to say about drug use, unprotected sex, and HIV prevention.

   Ask for two volunteers who'll be willing to participate in a role play. One of the students will be their hero, or the hero of some group of teens, one will be an interviewer (or, if the class wants to do some acting, this person could play a "devil's advocate" character). Give them a few minutes to decide on the scenario (i.e., a TV talk show or radio interview), then have them role play a discussion about drug use, unprotected sex, and HIV prevention.

   Ask the class for feedback about the hero's points of view and what specific attitudes or beliefs qualified them as a hero. If time allows, ask another pair of students to play two different characters in a similar situation.

7. For homework, ask students to find and report on an example of a hero in the fight against HIV infection in the local community or in a current periodical, or, if they're excited about a rock or sports star's point of view about HIV prevention, drug use, etc., they could research that. These brief (i.e., 2-3 page) reports could be shared orally or compiled in an informal booklet of student writings to be distributed to the class. Students should be sure to comment on what behaviors, attitudes and beliefs make this individual a hero in their eyes. This could be due in a week.

For discussion in class the next day, ask students to write a brief (i.e., 1 page) informal paper on the kinds of behaviors and attitudes about the HIV epidemic they could display which would make them "heroes" in their own lives.

Follow-up Activities

1. Ask students to prepare a display about heroes of the HIV/AIDS epidemic. Have them place this in the library, main lobby of the school, or cafeteria.

Maslow's Hierarchy of Needs From an HIV Perspective

Introduction

Issues of personal and societal safety take on new dimensions during an epidemic, particularly when the epidemic is accompanied by attitudes of denial. What do we mean by safety? Who is responsible for creating both the feeling and the reality of safety? What responsibilities do individuals have to others in considering safe behaviors and the attitudes which encourage them? This unit gives students the chance to explore these issues in the context of learning an important theory of psychological development.

Overview of the Lesson

Students hear an overview of Maslow's hierarchy of needs and discuss it in terms of the HIV/AIDS epidemic.

Objectives

1. For students to expand their knowledge and understanding of HIV/AIDS infection and related social issues.

2. For students to look at HIV prevention from the perspective of social development.

3. For students to gain knowledge and understanding of Maslow's hierarchy of needs.

4. For students to apply information about Maslow's theory to the HIV epidemic and their own behaviors.

Teacher Background

During this discussion, students may need a review of basic information about HIV infection and behaviors which put them at risk for contracting it (i.e., drug abuse, unprotected sex). Copies of the handout in Appendix A may be useful to have ready for distribution.

Tie-ins to the New York State Social Studies Curriculum

1. Students will demonstrate the ability to form or acquire a set of standards and apply them to the evaluation of assumptions, sources, evidence, reasoning and arguments (critical thinking) and to the evaluation of beliefs, qualities and behaviors (valuing).

2. Students will demonstrate the ability to empathize.

3. Students will demonstrate the ability to make appropriate decisions, to

identify and solve problems effectively and to initiate appropriate action.

The Activity Plan

1. Present an overview of Maslow's hierarchy of needs.

2. Ask students to consider who bears the responsibility for creating the feeling and reality of emotional or physical safety in the following situations. How do we define physical and emotional safety in terms of Maslow's hierarchy? How would safety be created in these situations?
   - Parents with their 3 year old child during a severe thunderstorm.
   - A student in a difficult class when s/he doesn't understand what's going on.
   - A group of friends driving around drinking or using drugs.
   - Someone going out to a party looking for a one night stand.
   - The government and the people of the United States regarding the spread of HIV infection.

3. Ask students to think about Maslow's hierarchy, and consider how the human need for belongingness and approval might influence a person's behavior (perhaps negatively) regarding personal safety. Ask students to think of examples from everyday life in the high school, or with people they know. They could also consider the examples above about the friends driving around, or the person going to the party.

4. Ask students to consider when they might think of safety as an issue faced by society as a whole. (Examples could include times of epidemic, war, or natural disaster.) How might an individual's actions impact family, friends, and the larger society in each of these cases?

5. Ask students how compromising on safety would affect someone's ability to progress towards actualization. How would an actualized person approach situations where drugs were being used or sex was expected?

6. For homework, have students pair up and develop a brief role play showing how the need for belonging and approval could pressure someone to act in an unsafe manner. Then ask the students to prepare a role play showing the same person in the same situation rejecting the pressure and choosing to act in a safe way.

Follow-up Activities

1. Arrange for students to perform and discuss their role plays in other classes, perhaps younger grades. They might also be videotaped for viewing in other classes or schools.

HIV & Me: Making the Connection

Introduction

In the minds and hearts of many teenagers, AIDS is someone else's disease. It belongs to the homosexual or bisexual man in the big city, or the IV drug user in the ghetto, not to friends who share the lunch table in the cafeteria, and certainly not to them as individuals. This is precisely the kind of attitude that can kill. HIV infection is just as much a teenage disease as it is anybody else's; in fact, teens are targeted by experts as being the "third wave" of the HIV epidemic sweeping the nation. This lesson is designed to help students make the connection between HIV/AIDS infection and their own lives.

Overview of the Lesson

Through a role play and discussion, students learn about factors and behaviors that are high risk for HIV infection, and they develop an awareness of alternatives.

Objectives

1. For students to apply their knowledge of psychological development to real-life situations.

2. For students to identify behaviors which put individuals at high risk for HIV infection, and think of alternatives.

3. For students to expand their knowledge of and sensitivity to HIV infection and related social issues.

Teacher Background

Public health educators and other officials are increasingly concerned about the rising rate of sexually transmitted diseases, particularly HIV infection, in young people. Gina Kolata of *The New York Times* writes "Not only are teenagers becoming infected with the virus, but it is also being transmitted through heterosexual intercourse, and equal numbers of males and females are infected."

The number of reported AIDS cases in teens has increased by 40% between 1987 and 1989. Altered behaviors due to drug and alcohol use are often a factor in infection. As well, increasing numbers of teenagers are sexually active at earlier ages, many have multiple partners, and few use condoms. These are the perfect conditions for the virus to spread. Kolata also reports "Teen-agers who have become infected with the AIDS virus said that they were not concerned at the time they were infected and gave no thought to safe sex practices until it was too late."

For a more complete discussion of the rising rates of HIV infection in teenaged youth, see "AIDS Is Spreading in Teen-Agers, A New Trend Alarming to Experts" *The New York Times*, October 8, 1989, as well as "The AIDS Threat to Teenagers" in *U.S. News & World Report*, October 23, 1989. Both articles may be found in Appendix G.

Tie-ins to the New York State Social Studies Curriculum

1. Students will note and evaluate the characteristics and behaviors of others before making judgements that might be influenced by stereotypes.

2. Students will demonstrate the ability to form or acquire a set of standards and apply them to the evaluation of assumptions, sources, evidence, reasoning and arguments (critical thinking) and to the evaluation of beliefs, qualities and behaviors (valuing).

3. Students will demonstrate the ability to make appropriate decisions, to identify and solve problems effectively and to initiate appropriate action.

4. Students will develop the ability to adjust, within ethical and legal limts, their own behavior to the dynamics of a situation, including the presence of change, diversity, ambiguity and conflict.

5. Students will demonstrate the ability to work with others in identifying a goal, formulating a plan, dividing tasks, carrying the plan out and evaluating the results and procedures used.

Activity Outline

1. Introduce the activity.

2. Ask students if they think HIV infection is an issue or potential problem in their school or among people they know. If they say no (and they probably will), ask them who they think it's a problem for. If they say yes, ask them why they think it is.

3. Review the basic facts of HIV infection, stressing the connection between the increased chance of infection and high risk behavior (i.e., unprotected sex, using IV drugs.)

   If they snicker about the unlikelihood of IV drug use in their peer group, discuss the fact that high risk behavior is more common when people are under the influence of any mood-altering chemical (i.e., alcohol, marijuana, cocaine, LSD--be sure to include substances you think are used in your school). Be sure to emphasize that you're not talking about IV drug use here; "just" the kind of partying many people seem to enjoy on weekends or during school.

4. Describe the phenomenon of the predicted "third wave" in the HIV/AIDS epidemic.

5. Ask for volunteers to participate in a role play. Take them aside and describe the scene you'd like them to play. The scene is a big party. The main characters are a boy and a girl who like each other, but who came to the party with friends, not each other. (Caution: be sure you have the students come up with names for their characters so they know that you know they're acting out someone else's behavior. You must be careful to make it clear you're asking them to play other people, not themselves.)

   The situation: he and his friends have decided no matter what it takes, the time has come to hit on this girl. She's told her friends she really likes this guy. Remembering that they're playing characters who have all been there for a while, partying and using their substance(s) of choice, your students are to act out what happens. Ask them to play it realistically. Give them a few minutes to plan the skit.

6. While the group is preparing, instruct the rest of the class to watch carefully. They are to note the attitudes, feelings and behaviors acted out before them.

7. Ask the students to perform their skit.

8. Ask the observers to comment. Questions for discussion might include:
   - What happened? Based on what they've seen and heard, was the skit realistic? What was realistic, what was unrealistic?
   - What attitudes did the characters seem to display?
   - What do the observers think they were feeling? Did the feelings change as the skit progressed?

   Then, given the earlier discussion about HIV infection, ask the students to assess the characters' behaviors in terms of risk.
   - Did any of their attitudes or behaviors put them at risk for HIV infection? (For example, what did she know about his background with sex and drug use, and vice versa? How did the substance use influence their judgement, or their ability to take action to protect themselves from infection?)
   - How might have they been influenced by having their friends there watching? Was "looking cool" a factor in their behavior?
   - What other factors were at play in the situation?
   - What short term benefits or costs did the situation hold for both characters, and how did those factors influence them? What long term costs or benefits did they overlook?
   - What could they have done in that situation to minimize their risk of HIV infection?
   - What stage of development did the characters seem to be in according to psychological theories the class has been studying?

9. For homework,
   a. ask the class to develop an alternative short skit or dialogue between the two characters where they would deal with the issue of HIV infection, individually or together, either in thoughts, actions or dialogue.

   b. ask class members to work together or individually to develop their own skits about the different factors they've observed or heard about which lead people to behave in ways which put them at risk for HIV infection. These will be performed or read to the rest of the class.

   c. ask the class to choose a psychological theory and write a description of how the two characters might have behaved if their main goal was their own wellness, growth and development.

Alternate Activity

For a class studying the theories of Sigmund Freud, use the following variation.

Each main character of the skit will be "shadowed" by students playing the ego, id and superego of that character. During the skit, these characters may function in one of several ways. They might speak directly to the character to show how their particular aspect of personality influences the character's actions. Or, they might speak in an aside to the audience, giving their view of the character and what s/he is or should be doing at the moment. Or, the three sub-characters might sit on the side and give their points of view about the character's actions and motivations after the skit is completed.

Follow-up Activities

1. Have students act out and discuss their skits in other classes.

2. Have students report on HIV infection in their age group.

3. Ask a young person who is HIV infected to come and speak to the class about how it happened and what life is like for them now.

Kohlberg's Theory of Moral Development and the HIV Crisis

Introduction

Just as the HIV crisis presents each member of society with a baffling array of public policy choices to make, so does it ask us to clarify our own personal beliefs about right and wrong in the face of situations and problems where there doesn't seem to be any one "correct" answer or solution. This activity provides students with an opportunity to experience the complexity of the issues raised by the crisis, to think through their own point of view, and to articulate it in a discussion.

Overview of the Lesson

Students participate in the discussion of a "moral dilemma" related to the HIV crisis. This activity may be done as an introduction to Kohlberg's theory, or as an example after the class has studied it.

Objectives

1. For students to receive an experiential introduction to Kohlberg's theory of moral development.
2. For students to raise their awareness of HIV issues.
3. For students to develop the ability to think critically and decide on their own point of view.
4. For students to participate in a class discussion about an HIV-related moral dilemma.

Teacher Background

Social psychologist Lawrence Kohlberg believes there are six distinct stages of moral development in humans. According to Kohlberg, these stages occur in the same order for everyone, and may be measured by an individual's response to a story involving a "moral dilemma." There are no right or wrong answers to a moral dilemma, but Kohlberg believes an individual's reasoning process about the solution will reveal his/her stage of development.

During the discussion of the dilemma, students may need information about aspects of HIV infection. Be prepared to provide brief information, or to assign students the task of researching more in-depth answers. (Questions might be noted on the board and assigned at the end of the period.)

Tie-ins to the New York State Social Studies Curriculum

1. Students will develop the ability to identify and investigate issues, generate and test hypotheses, and take and support positions persuasively.
2. Students will demonstrate the ability to form or acquire a set of standards and apply them to the evaluation of assumptions, sources, evidence, reasoning and arguments (critical thinking) and to the evaluation of beliefs, qualities and behaviors (valuing).
3. Students will demonstrate the ability to make appropriate decisions, to identify and solve problems effectively and to initiate appropriate action.
4. Students will develop the ability to adjust, within ethical and legal limits, their own behavior to the dynamics of a situation, including the presence of change, diversity, ambiguity and conflict.
5. Students will demonstrate the ability to determine and understand their rights and responsibilities and decide how they should be exercised as contributing citizens.

The Activity Plan

1. Duplicate enough dilemma description handouts so that each student in the class will have one.
2. Introduce the activity by giving a brief description of Kohlberg's work (as above), telling students they will be experiencing the process of a moral dilemma discussion in class as an introduction to the theory.
3. Set the ground rules for the discussion. These could include: everybody participates, one person talks at a time, everyone respects other class members' rights to have their own opinionS, when discussing the issue, each class member tries to draw out other people's thoughts and opinions (rather than 'win' an argument), etc.
4. Hand out the dilemma. Ask a student to read it out loud. Be sure the students understand the question they are responding to.
5. Ask the students to think over the situation, then take a firm stand (yes or no) in their response. They should take 5-10 minutes to write down their response, listing 3- 5 reasons for their point of view. Encourage students to choose 'yes' or 'no' and avoid a 'maybe' response; often, the discussion enables students to discover their initial responses or reasons are not actually what they believe, and taking an initial position allows them to clarify their thoughts much more quickly than a 'maybe' position would.

6. Through a quick show of hands, determine where the class stands on the issue. (You may want to ask students with similar viewpoints to get together in small groups, share their reasons, and prioritize their importance before opening the discussion to the large group.)

   Open the discussion to the group, being sure to stress that the purpose of the discussion is to clarify and explore the many different reasons behind the points of view class members have. As facilitator, you may wish to interject clarifying questions about a student's reasons for believing as they do, such as "So you believe it's most important for someone to obey the law rather than be popular?" or "Can you think of any instance where it might be more important to go against your friends?"

   Students may also seek a simplistic solution rather than grapple with the complexity of the moral dilemma. For example, in Kiri's dilemma, which follows, students may attempt to resolve the dilemma by deciding its not worth it to be involved with a person with AIDS (PWA). Encourage them to go beyond that point of view. For example, they might consider the depth of the relationship. How easy is it to cut a close friend out of your life? How would you keep them in your life and cope with grief, anger, fear, or other emotions serious illness can evoke? Something else for them to consider is the fact that it is impossible to tell by appearances if someone is HIV infected, so how can they use that as criteria by which to select friends?

   Discussions may become heated if students are not encouraged to listen to, understand, or draw on each other's lines of thought.

7. The purpose of the discussion is not to have the class arrive at any consensus about the dilemma, but rather, to assist students in more firmly establishing their individual point of view and an understanding of their reasons for that position.

   For homework, ask students to write up a brief discussion of their opinion and reasons for it, being sure to address the major arguments which oppose their own beliefs.

Follow-up Activities

1. Students may find it interesting to speculate on their own stage of development as they view it in their paper.

Handout A

Maria's Dilemma

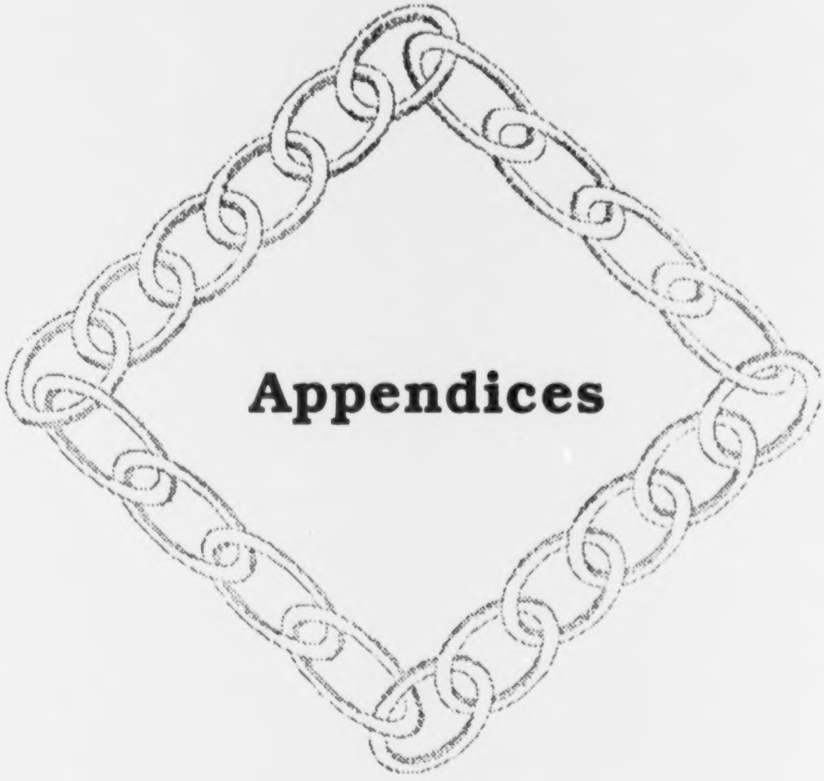
Maria's son, John, has HIV infection. The drug AZT has been prescribed to interrupt the progression of the disease and prevent the onset of AIDS for as long as possible. Because the medicine is so expensive, Maria and her husband have had to rely on a special program to get it. But the program is closing for lack of funds. John's supply of AZT will run out in two days.

Maria has come to the program's clinic to discuss other ways she and her husband might be able to get the medicine, but so far, the counselor has not been able to suggest anything that will work for them. While talking to Maria, the counselor is called out of the room on an emergency, leaving his keys on the corner of the desk. There is a medicine cabinet in the room; Maria can see a bottle of AZT inside. She has seen the counselor open the cabinet with the keys before. Should she take the AZT?

Kiri's Dilemma

Kiri and Sara have been friends since elementary school. Even though they've drifted into different groups over the years, they still think of each other as friends. Kiri knows Sara's group has been into drugs for a few years and that Sara has slept with a number of guys.

Sara has also been sick a lot this year. Most recently, she's been in the hospital for ten days with a bad lung infection, but the rumors are that she has AIDS. Kiri's parents have told her they prefer she doesn't hang around with Sara any more, but that it's her decision. A lot of Sara 's friends won't go see her in the hospital. Even though they know they can't "catch" HIV infection from casual contact, they're afraid. One night, Sara's mother calls Kiri and asks if she would go to see Sara in the hospital. Should Kiri go?



Appendices

Appendix A

Student Handout: What High School Juniors and Seniors Need to Know About HIV/AIDS

HIV/AIDS: What High School Juniors and Seniors Need to Know

AIDS: WHAT IT IS

AIDS stands for Acquired Immune Deficiency Syndrome.

This means that the body's immune system has broken down, leaving the body open to certain diseases and infections that are usually harmless or rare in healthy people.

AIDS is caused by a virus called HIV, which stands for Human Immunodeficiency Virus. HIV can infect you if it enters your body or bloodstream. Someone can carry HIV and not have AIDS or any signs of being sick. Even though you may not see signs of infection, HIV can be passed to other people.

HOW HIV IS SPREAD

There are two main ways HIV is spread:

- by having sex with an infected person
- by sharing infected hypodermic needles

HIV can also be spread:

- from an infected mother to her baby before, during, or after birth
- through blood or blood products given during transfusions. This is now very unlikely because since 1985, all blood has been tested before its use.

HOW HIV IS *NOT* SPREAD

Current research shows that HIV is not spread through casual contact or through the air. For example:

- by sitting next to someone at school, on a bus, at a concert, sports event, etc.
- by shaking hands, coughing, sneezing
- by using rest rooms, water fountains, telephones
- by sharing computer terminals, shop equipment, and other school supplies
- by eating in a cafeteria or sharing glasses, plates, forks or other eating utensils
- by using a pool, hot tub or locker room shower

WHY YOU SHOULD CARE

HIV, which leads to AIDS, is a fatal illness. There is no cure, no immunity and no vaccine. But it is preventable.

Anyone can get HIV, young or old, male or female, gay or straight. **It's not who you are but what you do that puts you at risk for getting HIV.**

HOW TO PROTECT YOURSELF

Because many people with HIV show no signs of being infected, you can't always be sure who carries it.

The surest way to protect yourself from HIV is by abstaining from sex and drugs. In other words, the best protection against HIV & AIDS is if you don't shoot drugs and you don't have intercourse.

You need to understand that when you have intercourse with one person, you're having sex with all the partners they've had before you. Remember: a single sexual contact with an infected person can be enough to give you the virus.

So if you choose to be sexually active, know your partner. And even if you do know your partner, **protect yourself by properly using a latex condom every time you have sex.**

FOR MORE INFORMATION, CALL TOLL FREE: NEW YORK AIDS HOTLINE 1-800-541-AIDS

Appendix B

Student Handout:
AIDS Myth - Fact Sheet

HIV/AIDS MYTH-FACT SHEET

In front of each statement that is **true**, put a **T**, and for each statement that is **false**, put an **F**.

1. Due to the ways the HIV is transmitted, it is unlikely that HIV infection can be transmitted by sitting next to someone in class.
2. Abstinence from sexual intercourse is the surest way to prevent transmission of the HIV.
3. People can look and feel healthy and still transmit the HIV.
4. People who shoot drugs and share their needles can get the HIV.
5. There is a vaccine to prevent AIDS.
6. Women cannot transmit the HIV.
7. Everyone who engages in sexual intercourse can be at risk for HIV infection.
8. Everyone infected with the AIDS virus has developed AIDS.
9. A person can get HIV infection from giving blood.
10. AIDS, itself, usually does not kill a person.
11. Most children with HIV infection got it from an infected mother.
12. A person who is concerned can take a blood test for HIV infection.
13. There is both a national and a state toll-free telephone hotline for AIDS information.

(See other side for answers)

Answers to AIDS MYTH-FACT SHEET

1. True
2. True
3. True
4. True
5. False
6. False
7. True
8. False
9. False
10. True
11. True
12. True
13. True

The U.S. Public Health Service 24-hour AIDS national hotline phone number is 1-800-342-AIDS.

The New York State hotline number is 1-800-541-AIDS.

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Appendix C

Current Information on HIV Infection for Teachers

Current Information on HIV Infection
(Adapted from the New York State Curriculum[1])

This brief overview provides administrators and teachers with a general understanding of HIV infection[2]. It should be supplemented as needed with other texts on the subject. Knowledge about the disease and its effects on individuals is constantly being updated. **Administrators and teachers should periodically review and update this information to assure that it is accurate.** In the sections "Description and Cause of HIV Infection," "Clinical Manifestations," "Transmission," and "Incidence," cited data related to New York State and New York City have been provided by the New York State Department of Health and the New York City Department of Health as reported to the Centers for Disease Control. These data represent the combined statistics for New York State. National statistics listed herein have been provided by the Centers for Disease Control.

Description and Cause of HIV Infection

o The AIDS virus **(called Human Immunodeficiency Virus-HIV[3])** primarily attacks certain white blood cells **(called T-Lymphocytes or T-4 helper cells, and more recently called CD-4 cells)** that are part of the body's internal defense against disease. The virus may also attack the central nervous system.

o An infected person's immune system responds by developing antibodies to fight off the invading virus. These antibodies to HIV, and not the virus itself, are most often identified by a blood test. The antibodies are detectable before a person has any signs of illness. However, the body's ability to produce disease fighting antibodies eventually becomes limited in HIV-infected persons as the virus reproduces and multiplies, killing the cells it has infected.

o Acquired Immune Deficiency Syndrome (**AIDS**) is a disease condition at the end of the continuum of HIV infection caused by a virus that attacks the body's immune system, making infected people vulnerable to opportunistic infections such as pneumonias, cancer, and neurological disorders.

Clinical Manifestations

o HIV infection may lead to disease[4] which can take many forms. It ranges from the complete absence of symptoms, to mild illness, to debilitating neurological disorders, and to fatal disease.

o The condition called AIDS represents a syndrome of late-stage diseases in which the immune system is unable to fight off other viruses, bacteria, protozoa, and fungi, resulting in infections and diseases that eventually cause the death of the individual.

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[1] Bureau of Health Education and Services, HEALTH-AIDS INSTRUCTIONAL GUIDE GRADES K-12. Albany, NY: The State Education Department, 1987.

[2] "HIV infection" is used here to describe the condition before symptoms of AIDS occurs. Infection can be detected within weeks of its occurrence by the HIV antibody test.

[3] The virus that causes AIDS has also been called HTLVIII (Human T-Lymphotropic Virus III) and LAV (Lymphadenopathy-Associated Virus) by some scientists. Currently it is designated as HIV in order to standardize its identification in publications worldwide.

[4] Disease: symptoms and illness.

o The condition called AIDS Related Complex **(ARC)** is no longer used by most physicians when referring to individuals who have a suppressed immune system and symptoms of HIV infection but not specific opportunistic infections. For an unknown percentage of individuals, ARC was a precursor to AIDS.

o As of July 1990, approximately 140,000 persons had contracted AIDS in the United States. According to the Centers for Disease Control, more than 1 million people in the U.S.have been infected with HIV and, according to the World Health Organization probably as many as 8-10 million world wide.

o The onset of symptoms associated with HIV infection may take from six months to ten or more years to appear after the virus has entered the body. Individuals carrying HIV are capable of infecting others.

o Symptoms related to HIV infection include:

- loss of appetite
- weight loss
- fever
- night sweats
- skin rashes
- diarrhea
- tiredness
- lack of resistance to infection
- swollen lymph glands
- short-term memory loss.

The symptoms are likely to be milder than those found in persons with AIDS and generally are present in a cyclic fashion with illness followed by periods of wellness.

o The symptoms that individuals with AIDS develop are related to the opportunistic diseases that have taken advantage of the compromised immune response due to HIV infection. These symptoms are usually persistent and difficult to treat, and they can progressively debilitate the person to the point of death. As noted in the New York State Department of Health's booklet **100 Questions and Answers - AIDS,** they may include:

- extreme tiredness, sometimes combined with headaches, dizziness, or lightheadedness;
- continued fever or night sweats;
- weight loss of more than 10 pounds that is not due to dieting or increased physical activity;
- swollen glands in the neck, armpits, or groin;
- purple or discolored growths on the skin or the mucous membranes (inside the mouth, anus, or nasal passages);
- heavy, continual dry cough that is not from smoking or that has lasted too long to be a cold or flu;
- continuing bouts of diarrhea;
- thrush (a thick whitish coating on the tongue or in the throat), which may be accompanied by sore throat;
- unexplained bleeding from any body opening or from growths on the skin or mucous membranes;
- bruising more easily than usual;
- progressive shortness of breath;
- confusion, lethargy, forgetfulness, lack of coordination, or general mental deterioration.

o Specific diseases that generally don't affect healthy adults are linked with HIV infection. In the United States, about 85 percent of the people with AIDS have had one or both of two rare diseases: *Pneumocystis carinii* pneumonia (PCP) and Kaposi's sarcoma (KS), a rare cancer.

Individuals with AIDS also develop severe infections with yeast, cytomegalovirus, herpes, toxoplasma, as well as TB.

o The incubation period before any symptoms of HIV infection appear varies significantly from person to person. Many infected people develop symptoms within two years of exposure. Others, infected up to seven years ago, have not yet shown any signs of illness. Since AIDS is a new disease, only recognized in 1981, the maximum incubation period has not yet been identified. Extensive research is in progress to identify potential internal or external cofactors that may cause some infected people to become fatally ill, while others have milder symptoms. A few of the cofactors identified to date include: age; stress; use of tobacco, alcohol, and other drugs; pregnancy; high levels of CD8 cells; and infection with less virulent strains of HIV.

o The American Medical Society's Committee on Alcoholism and Other Drug Dependencies urges groups at risk for exposure to HIV to abstain from alcohol use. The reason for this is that alcohol has immune-suppressant properties which could increase the risk of disease in persons who have already been exposed to the virus.

Transmission

Unlike flu or measles, HIV is not transmitted through the air; it must get into the bloodstream to cause infection. For this reason, HIV-infected people don't *pose a risk to others through any form of* casual contact. There is no evidence that HIV infection is transmitted through touching, hugging, kissing, coughing, sneezing, food preparation, drinking fountains, toilet seats, being around an infected person on a daily basis, or donating blood.

HIV has been found in blood, semen, vaginal secretions, breast milk, and other body fluids including tears and saliva[5] of an infected person. However, it is only found in high enough concentrations to transmit the virus in blood, semen, and vaginal fluids. Research indicates a small number where the virus has been transmitted through breast milk.

The virus is transmitted from one person to another by three routes: 1) through sexual intercourse, including vaginal intercourse, oral intercourse, and anal intercourse, 2) through exposure to infected blood; now this happens most often during IV drug use, and 3) from infected women to their infants during the prenatal period or through breast milk.

Sexual transmission of the AIDS virus occurs during intercourse. It is thought that it happens through abrasions or tiny, unfelt cuts that may occur in delicate tissues. Such tissue breaks can allow infected semen, blood, or vaginal fluid to enter the bloodstream of a sex partner. Anal intercourse is most risky, since tissue tearing and bleeding are likely to occur. The virus, however, can also pass directly through the thin mucous membrane of the vaginal canal, and it can be picked up directly by the monocytes in the rectal tissue. Transmission through exposure to infected blood occurs in persons sharing contaminated needles, syringes, and works during intravenous (IV) drug use. Small, even invisible, particles of infected blood can remain in the drug paraphernalia and can be injected into the bloodstream of the next user. The risk of HIV transmission through blood transfusions has been almost eliminated since all blood banks began testing donated blood for antibodies to HIV in 1985. There may be some risk to receiving blood if it was too early for the virus to show up when donor blood was tested. Blood-donor testing has been so effective it has reduced the risk of HIV infection from blood transfusion to one in a 100,000 pints of blood. There is no risk of HIV infection from donating blood; blood collection centers use new transfusion equipment for each donor.[6]

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[5] Although HIV is found in urine, tears, and saliva, there is no evidence to date supporting transmission of the virus through exposure to these body fluids.

All infected people, whether or not they have any symptoms, are presumed capable of transmitting the virus to others through blood-to-blood, or semen-to-blood exchange, or through vaginal secretions-to-blood exchange.

Incidence

Since the initial recognition of HIV in 1981, HIV infection has become a global problem. Researchers predict that up to 10 million people worldwide already may be infected with HIV; over 1 million live in the United States. During the nine years since AIDS was discovered in the United States (1981-1990), over 140,000 Americans have been diagnosed with AIDS and 61 percent of these people have died; over 31,000 cases have occurred in New York State. Scientists project that as many as 500,000 New York residents are infected with HIV and that the total number of AIDS cases in New York State will reach 45,000 by 1991.[7]

In New York State, about 45 percent of all people diagnosed with AIDS are homosexual and bisexual men; about 38 percent are male and female IV drug users; five percent have multiple risk factors; one percent are people who received infected blood transfusions; four percent are heterosexual contacts of infected persons; and two percent are children born to infected mothers. The other five percent are of undetermined origin. (Case information cannot be completed due to death, refusal to be interviewed, loss of follow-up, or are non-native Americans.)[8]

Research has yet to determine how broadly HIV infection is spreading within the general population.

> There is a broad spectrum of opinion about the extent of the likely spread in the United States of HIV infection in the heterosexual population, but there is strong agreement that the present surveillance systems have only limited capacity to detect such spread. (Data from the last year shows that this now represents 6 percent of the new cases.) Overall, the committee (Committee on a National Strategy

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[6] From 1981-1988 in the United States there were 229 cases of HIV infection from transfusions out of 230.1 million units of blood transfused (AIDS Weekly Surveillance Report, CDC, February 13, 1989). This includes 106 cases out of 9.12 million units in New York City (AIDS Surveillance Updates, New York City Department of Health, February 22,1989).

[7] This data is accurate as of July 1990.

[8] AIDS Surveillance Monthly Update, New York State Department of Health, December 1990.

> for AIDS) concludes that over the next 5 to 10 years there will be substantially more HIV infections in the heterosexual population and that these cases will occur predominantly in those subgroups of the population at risk for other sexually transmitted diseases.[9]

Preliminary data indicates that one in 300 college students in the United States is HIV positive. One in every 77 women of childbearing age in New York City and one in every 151 women of childbearing age statewide is HIV positive. And, in 1990, the CDC began gathering separate data about the incidence of HIV in teens and young adultsfor the first time.

Major Risk Factors

Persons at increased risk for being infected with HIV include:

- men who have sex with men
- present or past IV drug users
- sex partners of IV drug users
- male or female prostitutes and their sex partners
- sex partners of infected persons
- all persons with hemophilia who received blood-clotting factor and transfusions prior to 1985
- children born to infected mothers

Prevention

There is no vaccine against HIV infection or any treatment so far that can reverse HIV damage to the immune system. **People must learn how to protect themselves and their loved ones from this infection. It is essential that young people gain knowledge and skills to protect themselves before they reach an age at which they might experiment with sex or illegal drugs.**

Following are some basic elements of HIV information related to prevention.

The elements described will need to be adapted to varying degrees of specificity. Schools and their important community institutions, such as religious organizations, families, and voluntary organizations will need to adapt the presentation of this information to fit within their value systems. Within this framework, individuals will be able to determine responsible behavior, thereby avoiding adverse health consequences to themselves and others.

The specific wording and style of presentation, once developed, should be pretested on representative samples of the intended audiences to ensure effectiveness. Expert advice, consultation, and creative assistance can be provided by public and private health education experts.

The following information has been adopted from materials distributed by the Centers for Disease Control, Atlanta, Georgia, and the New York State Department of Health.

INDIVIDUALS IN ALL GROUPS NEED TO KNOW:

1. **Current information on the seriousness of the disease**

2. **How HIV is spread**

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[9] Source: Institute of Medicine: National Academy of Sciences. Confronting AIDS, Directions for Public Health, Health Care and Research: Washington, D.C. National Academy Press, 1986.

o HIV has been shown to be spread from an infected person to an uninfected person by:

- sexual contact (penis/vagina, penis/rectum, mouth/rectum, mouth/genitals)
- sharing needles or works used in injecting drugs
- an infected woman to her fetus or newly born baby (during the birth process or through nursing)
- transfusion or injection of infectious blood or blood fractions

o An individual can be infected with HIV without having symptoms of AIDS or appearing ill. Infected individuals without symptoms can transmit the infection to others. Once infected, a person is presumed infected for life, but actual symptoms may not develop for many years.

o A single exposure to HIV may result in infection.

3. How the virus is NOT known to be spread

o There is no evidence that the virus is spread through casual social contact (shaking hands, social kissing, coughing, sneezing; sharing swimming pools, bed linens, eating utensils, office equipment; being next to or served by an infected person). There is no reason to avoid an infected person in ordinary social contact.

o It is not spread by the process of giving blood; new transfusion equipment is used for each donor.

o It is not spread by sexual intercourse between individuals who have maintained a sexual relationship exclusively with each other over a long period of time (ten to twelve years), assuming that they have not been infected through contaminated blood factors, IV drug use, or by a previous sexual partner.

4. How to prevent infection

o Infection through sexual contact can be avoided by practicing abstinence or having a mutually monogamous marriage/relationship with no known risk factors in either partner. Young people can stay safe from HIV infection by not having sex. They need to know it is all right to say "No." In addition to the risk of HIV infection, there are other health reasons to postpone sex, including, the risk of gonorrhea, syphilis, and herpes, and unplanned pregnancies. Sexually transmitted diseases may increase one's risk of HIV infection.

o Do not use IV drugs; do not share needles or works. Young people can stay safe from HIV infection by not using IV drugs. They need to know it is all right to say "No," not only to IV drugs, but to alcohol and drugs of any kind, as these impair judgment. In addition to the risk of HIV infection, there are many other health reasons for abstaining from illegal drug use.

o If already sexually active:

- Until you ask a lot of questions about your partner's past sexual experience, medical history, and drug use, don't have sex with that person.

- The more people you have sex with, the greater the chances you may get infected, so don't have sex with multiple partners. Having intercourse with just one infected partner can lead to HIV transmission.

- With infected persons, using a condom during sex may help keep the virus from getting into your body. A condom is a thin rubber covering that is slipped over the penis before any sexual contact. Only latex condoms with a tip and with the spermicide nonoxynol-9 should be used.

- The chance of blood or semen entering your bloodstream is very high during anal sex, since it can cause tearing of delicate tissues, so avoid anal sex.

- Drugs and alcohol can lead you to do things you wouldn't do drug-free, so don't drink alcohol or use drugs of any kind.

5. **If there is suspicion of infection:**

o Abstain from sexual intercourse.

o Seek counseling and HIV antibody testing to be sure of infection status. Be aware that weeks to months may elapse from the time of infection to the time that antibodies to HIV appear in the blood. During this time persons may be infectious but the test may be negative. Early treatment may delay the onset of AIDS and reduce symptoms of HIV infection.

o Obtain counseling and testing if pregnancy is being considered.

6. **How to get more information about HIV infection and AIDS:**

o Call an AIDS hotline number.

o Call a personal physician, health department, or an AIDS-related community service organization.

7. **Information which will emphasize the seriousness of the problem, yet reduce inappropriate fear:**

o HIV infection is a national emergency requiring attention from all citizens.

o If people change their behaviors, the spread of HIV can be reduced.

o Blood for transfusion in the United States is screened for antibodies to HIV and is now essentially safe, but some risks cannot be eliminated.

o Everyone who engages in high-risk behavior is at risk for HIV infection, regardless of age, race, or socioeconomic status.

Research and Treatment

Researchers in the United States and other countries are working diligently to develop a vaccine to protect people from HIV. Vaccine development has been difficult. Although progress is being made, a vaccine is not expected to be available to the general public until perhaps the year 2000. There is no cure for HIV infection and AIDS at this time, nor is there any treatment that can restore the function of the immune system. A number of antiviral drugs including AZT (Azidothymidine) are being used by patients. While AZT has shown some promise in curbing the ability of the virus to reproduce itself inside human cells, the drug is highly toxic and has serious side effects. Some drugs used in cancer control, such as Interferon, are also being tried with AIDS patients. Recent findings indicate that lower doses of AZT used early (and then throughout HIV infection) reduce toxicity of the drug. DDI and DDC are intivirals that are used in combination with AZT or alone when AZT cannot be tolerated.

Societal Issues

When a disease epidemic threatens society, the needs of all people must be considered: those already infected with the disease, those threatened by the disease, and those who will provide support for others.

In the past, once treatment or medical prevention for an epidemic infection was easily available, society sought to protect itself by providing information to as many people as possible through school-based courses and educational campaigns and, in some cases, by requiring mass strategies such as immunization (polio) or premarital blood tests (syphilis).

As the number of HIV infection and AIDS cases mounts, this epidemic will have a significant and long-term impact on interpersonal and family relationships, medical care delivery, public policies, and health care resources. Because there is no available treatment, tremendous fears exist.

Education must be used to curb those fears that can lead to discriminatory behavior against people with HIV infection/AIDS. The rights of people with HIV infection/AIDS must be weighed and protected within the framework of disease prevention and with relation to the rights of those not infected.

Appendix D
A Compendium of Teacher Vocabulary

A Compendium of Teacher Vocabulary

Abstinence - No sexual intercourse, no IV drug use.

Acquired Immune Deficiency Syndrome - A disease caused by a virus which breaks down the body's immune system, making it vulnerable to opportunistic infections and cancer.

Addiction - Habitual use of a substance (like tobacco, alcohol, or IV drugs) and inability to stop the craving for such a substance.

AIDS - The initials for "Acquired Immune Deficiency Syndrome." A condition caused by a virus which breaks down the body's immune system, making it vulnerable to opportunistic infections such as cancers and occuring at the end of the disease continuum of HIV infection.

AIDS virus (HIV) test - A test used to detect antibodies against the AIDS virus (HIV) in blood samples. This test does not detect AIDS but rather the presence of the antibodies against the virus that can cause AIDS.

Antibodies - Substances in the blood produced by the body's immune system to fight against invading organisms.

Antigen - A substance that stimulates the production of antibodies.

Asymptomatic - No apparent symptoms of illness even though the individual tests positive for HIV.

Birth - The act or process of being born.

Bisexual - A person who has sexual orientation for both males and females.

Blood transfer - The act of transmitting blood from one individual to another. In pregnancy it would occur between the mother and unborn baby through maternal/fetal circulation.

Carrier - A person who harbors a specific infectious agent, in the absence of clinical disease, and serves as a potential source of infection.

Casual contact - The usual daily interaction between people at work, in school, or in social situations.

Communicable disease - A disease that is transmitted directly or indirectly from one person to another. It is caused by bacteria, viruses, and other organisms or their toxic products.

Condom - A sheath used to cover the penis. Condoms come in a variety of materials. Latex rubber is the material that prevents penetration of HIV and does not break as easily as other substances.Used during sexual intercourse to prevent the transmission of semen, blood, or vaginal secretions and to protect against the AIDS virus (HIV).

Contaminated needle/works - A needle or works that has been previously used, with infected blood or blood particles left on the needle/works to be passed on to the next user.

Fetus - Unborn baby developing in the uterus after the end of the second month of pregnancy. Before eight weeks it is called an embryo.

Heterosexual - A person who has a sexual orientation to persons of the opposite sex.

HIV - The Human Immunodeficiency Virus. It causes AIDS by attacking the body's immune system, making infected people vulnerable to fatal infections, cancer, and neurological disorders.

Homosexual - A person who has a sexual orientation to a person of the same sex.

Host - Any person in whom an infectious agent can live and multiply.

Illegal drugs - Drugs that are obtained through illegal means or for illegitimate medical purposes.

Immune system - A body system that helps fight off invading organisms and disease.

Immunization - A method of producing resistance to an infectious disease, usually by vaccination or innoculation.

Incubation period - The time interval between invasion by an infectious agent and appearance of the first sign or symptom of the disease in question.

Infected partner - Individual in a sexual relationship or IV drug-sharing situation who is carrying the AIDS virus (HIV) in his/her body.

Infectious agent - An organism (virus, bacterium, etc.) that is capable of producing infection or infectious disease.

Intravenous drugs - Drugs that are administered through a needle and syringe and injected directly into a vein and thus into the bloodstream.

Kaposi's sarcoma - A cancer or tumor of the blood and/or lymphatic vessel walls. It usually appears as a blue-violet to brownish skin blotches or bumps.

Lymphocyte - A type of white blood cell that is produced in the bone marrow. Some of these cells are called T-cells, others are called B-cells. The B-cells manufacture antibodies, and the T-cells regulate antibody production. In healthy people, about 60 percent of circulating lymphocytes are helper T-cells. In a person with AIDS, about two percent of the lymphocytes are helper T-cells. With fewer helper T-cells, the body is unable to recognize and attack invading organisms.

Method of entry - Manner in which organisms enter the host's body.

Method of escape - Manner in which an infectious agent exits the host's body.

Mode of transmission - Manner in which an infectious agent is transmitted from one person to another.

Monogamous - Having sexual intercourse with only one individual over a very long period of time.

Needles and works - Devices used to prepare and inject drugs directly into a ` vein and thus into the bloodstream.

Noncommunicable disease - A disease that is not transmitted from person to person.

Opportunistic infection - An infection caused by a microorganism that rarely causes disease in persons with a normal immune system.

Organism - Any living thing, such as a virus, a bacterium, etc.

***Pneumocystis carinii* pneumonia** - The most common life-threatening opportunistic infection diagnosed in AIDS patients. It is caused by a parasite, *Pneumocystis carinii.*

Pregnancy - The condition of having a developing embryo or fetus in the body.

Risk factor (for HIV) - Activity that makes a person more susceptible or more likely to be exposed to the AIDS virus (HIV).

Semen - The fluid that is expelled from the penis during sexual activity.

Sexual abstinence - Not having sexual intercourse with another person.

Sexual intercourse - Physical contact between individuals that involves the stimulation of the genitalia. Specifically: vaginal intercourse (penis/vagina), oral intercourse (mouth/penis or mouth/vagina), and anal intercourse (penis/rectum).

Spectrum - A range of factors associated with HIV infection or a range of outcomes.

Susceptible host - A person not possessing sufficient resistance against a particular organism to prevent contracting the infection when exposed to the organism.

T-Cells - A class of lymphocytes that play a major role in carrying out the activities of the immune system. Some T-cells are called helper T-cells.T-cells are in a group of cells now known as CD-4 cells.

Transmission - The passing of infectious agents from one person to another.

Uterus (womb) - Hollow, muscular, pear-shaped organ in females in which the unborn baby develops.

Vaginal secretions - Fluids within the vaginal tract.

Virus - A microscopic organism that can cause infections.

Appendix E

AIDS Regional Training Centers

New York State Regional AIDS Education Training Centers

Western New York
Diane Knight

Erie 1 BOCES
Instructional Development Center
591 Terrace Boulevard
DePew, NY 14043
(716) 684-2262

Serving schools in the counties of: Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Steuben, Wayne, Wyoming, and Yates.

Central New York
Jane Guiles
Emily Sharp, Eileen Ponto

Onondaga-Cortland-Madison BOCES
P.O. Box 4754
Syracuse, NY 13221
(315) 433-2627, 433-1533

Serving schools in the counties of: Broome, Cayuga, Chenango, Chemung, Cortland, Delaware, Herkimer, Jefferson, Lewis, Madison, Oneida, Onodaga, Oswego, Otsego, Schuyler, Tioga, and Tompkins.

Northern New York
Cathy Welling
Connie Orcutt

Albany-Schoharie-Schenectady BOCES
Regional Planning Center
47 Cornell Road
Latham, NY 12110
(518) 786-3211

Serving schools in the counties of: Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Montgomery, Rensselaer, St. Lawrence, Saratoga, Schenectady, Schoharie, Washington, and Warren.

Lower Hudson Valley New York
Kenneth L. Packer
Kate L. Lampel

Regional Health Education Center
BOCES
Yorktown Heights, NY 10598
(914) 245-2700, ext. 454

Serving schools in the counties of: Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester.

Long Island New York
Carol Daub

Suffolk 3 BOCES
Kellum Street School
887 Kellum Street
Lindenhurst, NY 11756
(516) 884-1000, ext. 247

Serving schools in the counties of: Nassau and Suffolk.

New York City
Gerri Abelson
John Torres
Dolores Cozier, Glen Robinson, Jody Stoll

New York City Board of Education
Office of Health, Physical Education
and School Sports
347 Baltic Street Room 202
Brooklyn, NY 11221
(718) 935-4140

Serving schools in the boroughs of: Bronx, Brooklyn, Manhattan, Queens, and Staten Island.

Appendix F

A Bibliography of Books, Films, Articles and Information Sources

AIDS: A BIBLIOGRAPHY OF BOOKS AND INFORMATION SOURCES

o Prepared by the Westchester Library System's Office of Special Services, and reviewed by the Regional AIDS Education Coordinators, this bibliography presents some of the materials currently available about AIDS. All titles listed may be found either at your local library or obtained through your local Library's Interlibrary Loan Service.

o Any materials that are being considered for use in the classroom or school library should be previewed and selected based on their appropriateness within that school community.

o This bibliography also indicates books available for preview at the Regional Health Education Center (located on the Putnam/Northern Westchester BOCES campus in Yorktown Heights, NY) and books especially suited for a high school audience. Call numbers are given when available.

Key to Symbols:

- * Book is available for preview at the **Regional Health Education Center** (Putnam/Northern Westchester BOCES, Yorktown Heights, NY)
- # Book especially suitable for **high school audience**

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o For help in obtaining additional information, contact your local library.

o **Please Note:** Literature and resources about AIDS are being added to and changed daily, making it almost impossible to compile a single, up-to-date bibliography. New information is always available.

o **Also Note:** Most books listed were written before 1988, therefore, they still use the term "ARC". Some may also give old statistics about HIV infection and AIDS related fatalities. Students will need to understand the changes in terms, information, and data.

BOOKS

* **AIDS: A SELF-CARE MANUAL.** *Edited by Betty Clare Moffatt, et.al. IBS Press, 1987.*
A handbook of advice on psychological and physical health, preventive and precautionary measures, and business affairs for both persons infected by HIV and those who care for them personally as well as professionally. [616.97]

* **AIDS AND THE LAW: A GUIDE FOR THE PUBLIC.** *Edited by Harlan Dalton and Scott Burris. Yale University Press, 1987.*
A comprehensive look at the legal issues raised by the AIDS epidemic. [344.73]

* **AIDS: FACTS AND ISSUES.** *Edited by Victor Gong and Norman Rudnick. Rutgers University, 1986.*
Examines the psychological, social, legal, and spiritual ramifications of the epidemic and includes 25 essays on health care, social welfare, education and law, a glossary of medical terminology, as well as a list of national and state health resources.[616.97]

Altman, Dennis. **AIDS IN THE MIND OF AMERICA.** *Doubleday/Anchor, 1986.*
The Australian gay liberationist compares political and social reactions to AIDS in several countries as he examines how the malady's identification with American gay men seriously impaired early efforts to deal with it.

Baker, Jane. **AIDS: EVERYTHING YOU MUST KNOW ABOUT THE KILLER EPIDEMIC OF THE '80s.** *R&E Publishers, 1986.*
Examines AIDS, its symptoms, causes, prevention, possible cures, insurance problems, etc.

*Coleman, Warren. **UNDERSTANDING AND PREVENTING AIDS.** *Children's Press, 1988. [616.9792]*

# Coulter, Harris. **AIDS AND SYPHILIS - THE HIDDEN LINK.** *North Atlantic Books, 1987.*
Considers the evidence that syphilis weakens the immune system enabling the AIDS - associated virus, HIV, to destroy the system.

# *Eagles, Douglas A. **THE MENACE OF AIDS: A SHADOW ON OUR LAND.** *F. Watts, 1988.*

Fortunato, John E. **AIDS: THE SPIRITUAL DILEMMA,** *Harper and Row, 1987.*
Shows how to transcend the AIDS crisis through spirituality.

Hancock, Graham and Carim, Enver. **AIDS: THE DEADLY EPIDEMIC.** *David & Charles, 1987.*
A global report on AIDS and its impact on the nations of the world.

# *Hein, Karen. **AIDS, TRAIDING FEAR FOR FACTS: A GUIDE FOR TEENS.** *Consumers Union, 1989*

Hoffman, Alice. **AT RISK.** *Putnam, 1988.*
Novel of a family singled out for grief. The 11 year old daughter tests positive for AIDS contracted from a blood transfusion. In detail, Hoffman depicts the effects of her illness on the members of the family.

Hudson, Rock and Davidson, Sarah. **ROCK HUDSON: HIS STORY.** *AVON, 1987.*
Details the movie actor's battle with AIDS.

Hunt, Morton. **GAY: WHAT YOU SHOULD KNOW ABOUT HOMOSEXUALITY.** *Farrar, Straus & Giroux, 1987.*
Examines the gay community since the onset of AIDS and discusses why AIDS is linked to homosexuality. Also, explains "safe sex". **(Appropriate for young adults)**

# * Hyde, Margaret O. and Forsyth, Elizabeth, H. **AIDS: WHAT DOES IT MEAN TO YOU?** *Walker & Co., 1987.*
Dispels misconceptions about AIDS and presents information on cause, associated opportunistic infections, and transmission, along with insights into the practical and emotional cost on its victims. **(Appropriate for younger readers)** [616.9792]

# * Hyde, Margaret O. and Forsyth, Elizabeth, H. **KNOW ABOUT AIDS** *Walker & Co., 1987.* [616.9792]

Institute of Medicine/The National Academy of Sciences. **CONFRONTING AIDS: DIRECTIONS FOR PUBLIC HEALTH, HEALTH CARE, AND RESEARCH.** *National Academy Press, 1986.*
Delves into the complex medical, social, ethical, financial and research problems arising from AIDS.

# * Jacobs, George and Kerrins, Joseph. **THE AIDS FILE.** *Cromlech Books, 1987.*
Focuses on techniques for prevention and provides answers to frequently asked questions about AIDS. [616.97]

# Kerr, M.E. **NIGHT KITES.** *Harper & Row, 1986.*
The brother of the protagonist of this young adult novel has AIDS; the books deals with the family's reaction to the disease. **(Appropriate for young adults)**

Kramer, Larry. **THE NORMAL HEART** . *NAL/Plume, 1985.*
The author-activist's autobiographical play dramatizes his role in founding the New York AIDS organization, Gay Men's Health Crisis, and his subsequent expulsion from it for being too confrontational toward a foot-dragging city administration.

Voices most of the political and life-style issues AIDS has crystallized for gay men.

# *Kubler-Ross, Elizabeth. **AIDS: THE ULTIMATE CHALLENGE.** *Macmillan, 1987.* The author of On Death and Dying describes the psychological states of terminally ill AIDS patients and addresses the pathology of the syndrome. [616.9792]

* Langone, John. **AIDS: THE FACTS.** *Little Brown, 1988.* Examines virus transmission, what co-factors may be involved in contracting the disease and possibilities for vaccine treatment. [616.97]

# * Lerner, Ethan A. **UNDERSTANDING AIDS A PRACTICAL GUIDE.** *Lerner Publications, 1987.* Examines virus transmission, what co-factors may be involved in contracting the disease, and possibilities for treatment. **(Appropriate for younger teenagers.)** [616.9792]

# *LeVert, Suzanne. **AIDS; IN SEARCH OF A KILLER.** *J. Messner, 1987.*

# ***LIFE PLANNING EDUCATION: A YOUTH DEVELOPMENT PROGRAM. (A curriculum).** *The Center for Population Options, 1989.*

* Masters, William H. and others. **CRISIS: HETEROSEXUAL BEHAVIOR IN THE AGE OF AIDS.** *Grove, 1988.* Controversial consideration of the spread of the disease. [616.9]

Moffatt, Betty Clare. **WHEN SOMEONE YOU LOVE HAS AIDS: A BOOK OF HOPE FOR FAMILY AND FRIENDS**. *NAL/Plume, 1987.* The mother of an AIDS-afflicted gay man relates his and other AIDS patients stories and tells of her own recovery from cancer, offering inspiration to others in similar situations and hopeful enlightenment on daily living with debilitating sickness.

Monette, Paul. **BORROWED TIME: AN AIDS MEMOIR**. *Harcourt Brace Jovanovich, 1988.* A chronicle of the death of Roger Horwitz, the author's beloved friend, who died of complications of AIDS in October, 1986.

Money, J.W. **TO ALL THE GIRLS I'VE LOVED BEFORE: AN A.I.D.S. DIARY.** *Alyson, 1987.* The notes of a man dying of AIDS; memories of a most unusual life mixed with wry observations about his illness in an amusing and valiant last testament.

* Norwood, Chris. **ADVICE FOR LIFE: A WOMAN'S GUIDE TO AIDS RISKS AND PREVENTION**. *Pantheon, 1987.* This National Women's Health Network guide discusses AIDS prevention and education for women, who form the fastest-growing risk group in America. Subjects covered include what medical tests do and do not show, who are the carriers,

symptoms and disease patterns in women, how to talk with men about their past relations, and how mothers can talk to their children **(especially teenagers)** on the topic. [362.1]

# * Nourse, Alan E. **AIDS.** *Franklin Watts, 1986.*
Explains the functioning of the immune system and how the HIV virus breaks it down, accompanied by necessary background on discovery and cause. **(Appropriate for young adults)** [616.9792]

# * Nourse, Alan E. **YOUR IMMUNE SYSTEM**. *Franklin Watts, 1982.*
Provides an understanding of the immune system and how it functions. Good background understanding for teens of how HIV attacks the body. [612.079]

Nungesser, Lon G. **AN EPIDEMIC OF COURAGE: FACING AIDS IN AMERICA** *St. Martin's Press, 1986.*
The author, an AIDS patient, talks to seven men with AIDS about the impact the disease has had on their lives and spirit and how they cope with it. He also interviews a lover, mother, brother, health care provider, and a friend about the crises suffered by those who love and work with people with AIDS.

O'Connor, Tom and Gonzalez-Nunez, Ahmed. **LIVING WITH AIDS: REACHING OUT.** *Corwin Publishers, 1987.*
O'Connor has lived with ARC for seven years and has investigated an astonishing array of conventional and alternative therapies. His is the most sensible, accessible, and balanced of several holistic health works on AIDS.

Peabody, Barbara. **THE SCREAMING ROOM: A MOTHER'S JOURNAL OF HER SON'S STRUGGLE WITH AIDS**. *Avon, 1987.*
A woman's account of her dedication to her terminally ill son and their last days together.

Pearson, Carol Lynn. **GOOD-BYE, I LOVE YOU: THE TRUE STORY OF A WIFE, HER HOMOSEXUAL HUSBAND - AND A LOVE HONORED FOR TIME AND ALL ETERNITY.** *Random House, 1986.*
An account by a Morman woman of how she and her children faced her husband's homosexuality and his subsequent death from AIDS.

Reed, Paul. **SERENITY**. *Celestial Arts, 1987.*
Gay men are the primary intended audience for this inspirational but strictly non-religious brief. Reed's advice on changing sexual attitudes and modifying lifestyles, however, may help anyone who is downcast about the end of the old-style, promiscuous sexual revolution.

Richardson, Diana. **WOMEN AND AIDS.** *Methuen/Pandora, 1987.*
Answers medical and social questions about AIDS risks for women, special issues regarding lesbians and AIDS, rape and AIDS, how the government policy on AIDS

affects women and more. Includes interviews with women who have AIDS or care for AIDS patients.

# *Shilts, Randy. **AND THE BAND PLAYED ON: POLITICS, PEOPLE, AND THE AIDS EPIDEMIC.** *St. Martin's, 1987.*
Chronicle of the five-year political, scientific, and social battle to force government, the medical and blood-bank establishments, the news media, and gay men to take AIDS seriously. Written in exciting, novelistic style by a reporter who has covered AIDS since 1981. **(Of historical interest. May be overwhelming to some high school students.)** [362.1]

# *Silverstein, Alvin and Silverstein, Virginia **AIDS; THE DEADLY THREAT.** *Enslow, 1986.*
Documenting AIDS as a problem of international scope, the authors offer both medical and humanistic perspectives on the syndrome, including discussion of several of the ethical dilemmas AIDS has prompted. **(Appropriate for young adults)** [616.9792]

WHAT TO DO ABOUT AIDS: PHYSICIANS AND MENTAL HEALTH PROFESSIONALS DISCUSS THE ISSUES. *Edited by Leon McKusick. University of California Press, 1986.*
Incorporates medical and mental health information into a health science overview of the epidemic. Clinical psychology, psychiatry, nursing, social work, and patient counseling are examined.

#Whitemore, George. **SOMEONE WAS HERE:PROFILES IN THE AIDS EPIDEMIC.** *NAL Boks/New American Library, 1988.* A novelist explores the impact of AIDS on the lives of the members of a family.

INFORMATION SOURCES

HOTLINES

AIDSline	914-993-0607
National AIDS Hotline (information & referral)	800-342-AIDS (tape)
National Gay Task Force AIDS Hotline	800-221-7044
New York City AIDS Hotline (English & Spanish)	718-485-8111
New York City Gay Task Force AIDS Hotline	212-807-6655
New York State AIDS Hotline (English & Spanish)	800-541-AIDS
Pediatric & Pregnancy AIDS Hotline	212-430-3333

Resources for More Information and/or Counseling

The following is a sample listing of available resources. Please review your own community for others.

Telephone Hotlines (Toll-Free)

Public Health Service AIDS Hotline
1-800-342-AIDS

New York State Department of Health AIDS Hotline
1-800-541-AIDS

Information Sources

U.S. Public Health Service
Public Affairs Office
Hubert H. Humphrey Building
Room 725-H
200 Independence Avenue, SW
Washington, DC 20201

AIDS Institute
Education and Training
New York State Department of Health
Corning Tower - 25th Floor
Empire State Plaza
Albany, NY 12237
(518) 473-7924

American Red Cross
AIDS Education Office
1730 D Street, NW
Washington, DC 20006
(202) 737-8300

Hemophilia Foundation
104 East 40th Street
New York, NY 10016
(212) 682-5510

New York City

Department of Health: AIDS Information
Questions about HIV, about AIDS, and about being at risk
(718) 485-8111

New York State HIV Counseling and Testing

For free, confidential counseling, testing, and referrals, call a regional hotline and ask for an HIV counselor or a State health investigator.

Albany area	(518) 457-7152
Buffalo area	(716) 847-4520
Nassau area	(516) 535-2004
New Rochelle area	(914) 632-4133 Ext. 439
Rochester area	(716) 423-8081
Suffolk area	(516) 348-2999
Syracuse area	(315) 428-4736

Community Service Programs in New York State

For free, confidential assistance, call regional area programs.

AIDS Council of Northeastern NY
Albany (518) 445-AIDS

Western NY AIDS Program, Inc.
Buffalo (716) 881-AIDS

Long Island Association for AIDS Care, Inc.
Nassau and Suffolk Counties (516) 385-AIDS

AIDS-Related Community Services
Westchester County (914) 993-0607

AIDS Rochester, Inc.
Rochester (716) 232-4430

Central NY AIDS Task Force
Syracuse (315) 475-AIDS

Southern Tier AIDS Task Force
Binghamton (607) 723-6520

Hemophilia Foundation
NYC (212) 682-5510

Montefiore Hospital
Bronx (212) 920-4017

Pediatrics and Pregnant Women

Albert Einstein College of Medicine
(212) 430-3333

Drug-Related Issues

New York State Division of Substance Abuse Services
1-800-522-5353

Urban Resource Institute
Brooklyn (718) 852-8042

Beth Israel
NYC (212) 420-2650

This is a sample listing of available resources. Please review your own community for others.

Appendix G

The Third Wave: HIV-Related Illness and Teenagers

The facts

Adolescents, AIDS, and the Human Immunodeficiency Virus

Human Immunodeficiency Virus (HIV), the virus that causes Acquired Immunodeficiency Syndrome (AIDS), is epidemic in the United States, affecting all sectors of society. Many public health officials believe that teenagers, because of their experimentation with sex and drugs, are at increasingly high risk of becoming infected with HIV.

Status of HIV infection in the U.S.

- An estimated 1 to 1.5 million Americans are infected with HIV.[1]
- As of February 28, 1989, 88,096 cases of AIDS in the U.S. and 51,310 deaths caused by AIDS had been reported to the Centers for Disease Control.[2]
- These numbers underestimate the true magnitude of HIV morbidity, since many clinical manifestations are not reportable even under the current AIDS surveillance definition.[3]
- The U.S. Public Health Service predicts there will be 365,000 diagnosed cases of AIDS and 263,000 deaths caused by AIDS reported to the Centers for Disease Control by the end of 1992.[1]
- In 1992, 172,000 AIDS patients will require medical care at a cost expected to range from $5 billion to $13 billion.[3]

Terminology

The Presidential Commission on the Human Immunodeficiency Virus Epidemic has determined that the term "AIDS" no longer adequately describes the scope of the public health problem society faces. The Commission's final report stated: "The term 'AIDS' is obsolete. 'HIV infection' more correctly defines the problem. . . Continued focus on the label 'AIDS' contributes to the lack of understanding of the importance of HIV infection as the more significant element for taking control of the epidemic."

HIV infection among teenagers and young adults

- As of February 28, 1989, 352 cases of AIDS among teenagers were reported to the Centers for Disease Control. Of the teenagers infected, 46 percent are white, 34 percent are Black, 18 percent are Hispanic and 2 percent are of other races.[2]
- Over one-fifth of people with AIDS are in their twenties.[2] Because the latency period between HIV infection and onset of symptoms is about ten years[4], most of these people probably contracted HIV as teenagers.
- AIDS cases among 13 to 19-year-olds increased by 51 percent between February 29, 1988[5] and February 28, 1989.[2]
- A greater proportion of adolescents than adults with AIDS are female (18 percent vs. 9 percent), are Black and Hispanic (52 percent vs. 41 percent)[2] and were infected with HIV through heterosexual contact (9 percent vs. 4 percent).[6]
- Of the 1,111 homeless and runaway youth anonymously tested for evidence of HIV infection, 74 (7 percent) indicated signs of the virus, according to the results of a New York City study conducted from October, 1987 to October, 1988.[7]
- AIDS is the leading cause of death for women ages 25 to 34 in New York City; among women ages 15 to 24, it is the fourth most common cause of death.[8]

Teens at risk

Sexual intercourse

- On average, young women first engage in sexual intercourse when they are 16.2 years old. For young men, the average age of first intercourse is 15.7 years.[9]
- For most young men and women, the decision to have sex is spontaneous. Only 17 percent of young women and 25 percent of young men report planning their first act of intercourse.[9]
- One in six high school girls engaging in sexual intercourse has had at least four different sexual partners.[10]
- Incidence of homosexual behavior, potentially of a high-risk nature, has been reported in surveys conducted over the past several decades to occur in 17 to 37 percent of adolescent males.[11]

Sexually transmitted diseases

- A recent study shows that people with a history of sexually transmitted diseases (STDs) have a higher incidence of HIV infection than people with no such history.[12]
- Each year, 2.5 million teenagers contract an STD — or about one teenager in every six.[10]
- While latex condoms, used consistently and correctly, are not 100 percent effective in protecting against HIV infection, they provide the best protection available for people engaging in sexual intercourse.[13]
- Only 24 percent of sexually active women aged 15 to 19 use contraception consistently. Of the young women using contraception, only 21 percent protect themselves against STDs by using condoms.[14]
- In a recent study of Washington, DC drug and convenience stores, teenagers found it difficult to find and buy condoms, and females had more negative experiences buying condoms than did males.[15]

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Population
Options

Drug and alcohol use

- Use of drugs and alcohol impairs a person's willingness and ability to use condoms or other precautions while having sex.[11]
- Among adolescents surveyed in 1987, about one-fourth of 8th grade students (26 percent) and more than one-third of 10th grade students (38 percent) report having had five or more alcoholic drinks on one occasion during the previous two weeks.[16]
- About one out of every fifteen adolescents has tried cocaine.[16]
- In a 1987 study conducted for the National Institute on Drug Abuse, 1.2 percent of U.S. high school seniors reported having used heroin.[17]

Runaways and prostitution

- About one million U.S. teenagers run away from home each year.[18]
- An estimated 125,000 to 200,000 teenage men and women become involved in prostitution each year; approximately one-third of these young people are not runaways.[19]

Knowledge and attitudes about HIV infection/prevention

- The 1987 National Adolescent Student Health Survey of eighth and tenth graders revealed that:
  - More than one-third of the students did not know the common early signs of STDs.
  - More than one-half of the students did not know that birth control pills do not provide protection against STDs.
  - Two-thirds of the students (67 percent) did not know that washing after sex is an ineffective way of avoiding STDs.[16]
- A 1987 NBC poll found that 91 percent of adults approve of teaching AIDS prevention to children in public schools.[20]
- Of these same adults, 79 percent favor television advertising to promote the use of condoms for AIDS prevention.[20]
- In a national study, 98 percent of school administrators indicated that AIDS instruction belongs in the regular school curriculum. Eighty-five percent believe that a discussion of safe sex along with abstinence is more realistic than abstinence alone.[21]
- Almost all teens (89 percent to 96.8 percent) in urban studies agree that it is important for students their age to receive AIDS education instruction through the school curriculum.[22]

Notes

1. Centers for Disease Control, *Morbidity and Mortality Weekly Report*, (MMWR), Vol. 37, No. 36, September 16, 1988.

2. Centers for Disease Control, *HIV/AIDS Surveillance Report*, March 1989.

3. Journal of the U.S. Public Health Service, Report of the Second Public Health Service AIDS Prevention and Control Conference, *Public Health Reports*, Vol. 103, Supplement No. 1, p. 10, 1988.

4. Bacchette, P. & Moss, A., *Nature*, March 16, 1989.

5. Centers for Disease Control, *Acquired Immunodeficiency Syndrome Weekly Surveillance Report*, February 19, 1988.

6. Goldsmith, Marsha F., "Stockholm Speakers on Adolescents and AIDS: 'Catch Them Before They Catch It,'" *Journal of the American Medical Association (JAMA)*, Vol. 260, No. 6, p. 758, August 12, 1988.

7. Kennedy, Dr. James T., Covenant House Study, October 1988.

8. Berenson, L., Biostatistics Division, New York City Department of Public Health, telephone interview, December 18, 1987.

9. Zelnik, M. and Shah, F., "First Intercourse Among Young Americans," *Family Planning Perspectives*, March-April 1983.

10. Madaras, Lynda, *Lynda Madaras Talks to Teens About AIDS*, Newmarket Press, p. 36, 1988.

11. Remafedi, G., M.D., M.P.H., "Preventing the Sexual Transmission of AIDS During Adolescence," *Journal of Adolescent Health Care*, Vol. 9, No. 2, pp. 139-143, March 1988.

12. Cates, Willard, "The 'Other STDs:' Do They Really Matter?" *JAMA*, Vol. 259, No. 24, p. 3606, June 24, 1988.

13. Centers for Disease Control, "Guidelines for Effective School Health Education To Prevent the Spread of AIDS," *MMWR*, Vol. 37, No. S-2, January 29, 1988.

14. Bachrach, C.A., Horn, M.C., Mosher, W.D., and Pratt, W.F., "Understanding US Fertility: Findings from the National Survey of Family Growth, Cycle III," *Population Bulletin*, Vol. 39, No. 5, December 1984.

15. Center for Population Options, "Teens' Survey of Stores in the District of Columbia on Accessibility of Family Planning Methods," 1988.

16. American School Health Association, Association for the Advancement of Health Education and Society for Public Health Education, *National Adolescent Student Health Survey*, 1987.

17. U.S. Department of Health and Human Services, National Institute on Drug Abuse, press release, April 1988.

18. U.S. Department of Health and Human Services, *Fiscal Year 1985 Study of Runaways and Youth*, Washington, DC, 1986.

19. Loken, G., Covenant House, New York, telephone interview, March 1987.

20. National Broadcasting Corporation, Inc., "NBC News Poll Results," New York, January 16, 1987.

21. American Association of School Administrators, Arlington, VA, 1988.

22. Centers for Disease Control, *MMWR*, Vol. 37, No. 47, December 2, 1988.

Center for Population Options

The Center for Population Options (CPO) is a nonprofit educational organization dedicated to improving the quality of life for adolescents by preventing too-early childbearing.

CPO's national and international programs seek to improve adolescent decision-making through "life planning" and other educational programs, to improve access to reproductive health care, to promote the development of school-based clinics, and to prevent the spread among adolescents of HIV and other sexually transmitted diseases.

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The AIDS threat to teenagers

Casual sex and crack cocaine use are fueling a frightening increase in AIDS infections among American teens

Predictions made over the past decade that AIDS would break out among heterosexual adults proved wildly exaggerated, another episode in America's bumpy response to the epidemic. While those forecasts were based mostly on conjecture, there is new evidence that the virus is spreading among teenagers, especially inner-city youths and runaways, fed by the potent mixture of casual sex and crack cocaine.

An exact picture of the danger AIDS poses to teenagers is almost impossible to obtain, but an unsettling portrait of a major problem is emerging. A new analysis by the U.S. Centers for Disease Control of blood samples collected from 40 urban hospitals reveals 1 percent of 15 and 16-year-olds in high-risk cities such as Miami and New York are infected with the AIDS virus, and among 21-year-olds the infection rate approaches 3 percent. Even in cities that researchers defined as medium-risk, such as Atlanta, Chicago and Dallas, about 1 percent of the 21-year-olds are infected. At the college level, 1 in 500 students, a total of 25,000, may carry the virus, according to a blood-sample survey conducted at 19 campuses last year by the American College Health Association. "There is no doubt the AIDS epidemic of the 1990s, if there is no vaccine, will be among minority teenagers," says Dr. Charles Wibbelsman, chief of the teen clinic at Kaiser Permanente Medical Center in San Francisco.

The prospect of a "third wave" of the AIDS epidemic—following the outbreak among gay men and intravenous drug users—is spurring controversial calls from health professionals for more-explicit AIDS education, including instruction in using condoms. Meanwhile, evidence that AZT and possibly other drugs can retard the onset of AIDS is adding urgency to efforts to set up specialized clinics that can counsel and treat infected youths. For example, San Francisco General Hospital will soon open a teen clinic that will administer AIDS drugs and anchor an emerging citywide service network for high-risk youths. And in Los Angeles, what may be the nation's first residential shelter for teens with AIDS will open later this year.

The dramatic rise in crack-cocaine use by teenagers is partly responsible for the spread of the AIDS virus because it leads to promiscuity

THE TOLL OF A DISEASE

This is the AIDS story in America since June 1, 1981:

Total cases: *104,210* **Total deaths:** *61,655*

Infection from homosexual, bisexual contact: *60,983*
Cases attributed to IV drug use: *18,298*
Cases among those age 13-29: *22,141*

Total number infected: *1.5 million (est.)*
Number infected age 13-29: *220,000 (est.)*

USN&WR—Basic data: Centers for Disease Control

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Reprinted with permission by U.S. News & World Report and sex-for-drugs trades. Martha Rogers, chief of AIDS epidemiology at the U.S. Center for Infectious Diseases in Atlanta, believes crack houses are becoming the heterosexual equivalent of the gay bathhouses as places where the human immunodeficiency virus (HIV) is transmitted.

Experts who witnessed the onset of AIDS among homosexuals in the early 1980s feel a sense of *déjà vu*. While only 415 cases of AIDS have been reported among 13-to-19-year-olds, there are more than 5,000 cases among 19-to-24-year-olds, most of whom are thought to have been exposed to the virus while teenagers. Researchers stress that looking at the small number of clinical AIDS cases among teens is grossly misleading, since symptoms don't appear until an average of seven years after infection.

"I was too good." While anxieties about teen AIDS focus on minority and gay youth, there is reason to worry about heterosexual white kids, too. Despite exhortations to "just say no," the average American teenager loses virginity at age 16. Since few teens are tested, most of those who are infected do not know they are carrying the HIV virus. And of those who do know, fear of ostracism keeps many from going public—even to parents. That is the case for a 19-year-old Southern California student who, her doctor says, could be "your daughter or mine." A few months ago, the young woman, who wishes to remain anonymous, learned her high-school boyfriend had dabbled with "crystal meth," an injectable form of speed, and unwittingly infected her during intercourse. "I didn't think I'd ever sleep with somebody who was bisexual or did drugs," she says. "I was too good."

New approaches to AIDS education are being tried against a backdrop of evidence that sexually active teens still use condoms only sporadically. The CDC has expanded funding for teacher training and for pilot programs directed at teen dropouts. There is also a new media campaign that includes snappy TV and radio spots, in which teens romantically ask partners to "wait a little longer," and a free "AIDS Prevention Guide" from the CDC with tips on how parents can talk to their children.

But there is still a potentially divisive debate brewing over the content of AIDS education. Consider the case of Boston, where Cardinal Bernard Law in May urged Catholic parents to pull their children out of public-school AIDS classes because their discussion of sex and condoms was "amoral." The archdiocese is offering an alternative program, which stresses abstinence, but some health professionals, including former Surgeon General C. Everett Koop, fear such approaches are unrealistic and insufficient. "If we can't say the C (condom) word in school, we are not going to save this generation," says pediatrician Karen Hein, who directs a model Adolescent AIDS Program at the Montefiore Medical Center in the Bronx.

"[The Boston public schools present] sexual behavior in a valueless, amoral context."

Cardinal Bernard Law

"Short of monogamy and abstinence, condoms seem to offer the best barrier to the transmission of AIDS."

C. Everett Koop

Twenty-eight states and the District of Columbia now require some AIDS instruction, up from 17 in 1987, but the content varies widely. The General Accounting Office has issued three reports critical of federal AIDS education efforts, and many medical experts say that valuable time has been lost. Hein's hospital-based program in the Bronx stresses "skills training" such as how to use a condom and alternatives to intercourse, like petting. Canadians are going even further. Last month, the Toronto school board voted to install condom machines in several high schools, while in Ottawa, condoms are handed out free in public high schools.

Teen-to-teen counseling is emerging as a good way to get nonpreachy messages across. In drug-ridden neighborhoods in San Francisco and New York, and soon in Los Angeles, health departments and community agencies sponsor rap-song contests about AIDS. In South Central L.A., the Minority AIDS Project is paying tough street youths to seek out and warn their hard-to-reach peers. In New York, Alison Gertz, a 23-year-old woman who grew up on Park Avenue and was infected with AIDS through sex at age 16, is among a group of AIDS patients who visit schools to tell their stories.

Perhaps the most provocative and effective AIDS instruction is the use of teen theater troupes, a technique often employed in schools to discourage drinking and drug use. Kaiser Permanente, the nation's largest health-maintenance organization, next year will extend high-school performances of "Secrets," a teen AIDS play, to Washington, D.C., Ohio, Colorado and Southern California in addition to Northern California, where 50,000 students have seen it. The story of a Latino teen who shared a few needles and inadvertently infects other teens, "Secrets" uses young-adult actors and teen dialogue to impart an AIDS message that is two parts abstinence, one part condom use.

In fits and starts, minority communities are overcoming their denial and expanding their AIDS-education efforts. Last February, the Urban League launched an information campaign for black youths, including an outreach campaign in Jacksonville, Fla., where volunteers go door-to-door in high-crime housing projects, handing out pamphlets and condoms. In New York, the 2-year-old Black Leadership Commission on AIDS hopes to enlist 600 black congregations in AIDS education by next year. Still, minority-health educators concede that resistance to condom use and macho male attitudes continue to impede the teens-education effort among blacks and Hispanics.

Youth specialists caution middle-class white parents against denial, too. "We're looking at HIV infection the same way we saw drug abuse and teen pregnancy in the 1970s, as a problem of kids on the street, of hookers, IV drug users and gays," worries Dr. Richard MacKenzie, who runs the adolescent-medicine division at Children's Hospital Los Angeles. "I can see us in 5 and 10 years right where we are now with drugs, declaring a war on AIDS." Indeed, the challenges in getting kids free of ruinous drugs and a killer disease such as AIDS are inextricably linked. As the drug war demonstrates, there is still much to learn about how best to do it. ■

by Peter Dworkin with Scott Minerbrook

AIDS Is Spreading in Teen-Agers, A New Trend Alarming to Experts

By GINA KOLATA

Alarmed by new data showing that the AIDS virus is rapidly spreading among some groups of teen-agers, experts are calling for an expanded national effort against the epidemic.

Not only are teen-agers becoming infected with the virus, but it is also being transmitted through heterosexual intercourse, and equal numbers of males and females are infected. By contrast, among adults the virus has been transmitted primarily through homosexual sex or intravenous drug use, and the number of infected men far exceeds the number of infected women.

Conditions are ripe for the virus to spread because many teen-agers have multiple sexual partners and very few use condoms.

The Federal Centers for Disease Control says 415 cases of AIDS have been reported among people from the ages of 13 to 19. Charles Fallis, a spokesman for the centers, said the agency does not yet have any estimates of the number of teen-agers infected "but we're working on it."

But new studies indicate that the infection rate in some teen-age groups is far higher than that for adults.

The extent of AIDS infection among teen-agers "is going to be the next crisis," said Dr. Gary R. Strokash, director of adolescent medicine at Rush Presbyterian St. Luke's Medical Center in Chicago. "It's dreadful and it's going to be devastating."

In many ways, researchers say teen-agers are like gay men at the beginning of the AIDS epidemic: the number of full-fledged AIDS cases is relatively low, but there are abundant signs that the human immunodeficiency virus, which causes AIDS, is spreading. Doctors who just a year ago did not have one infected teen-age patient now have a dozen or more.

The number of reported AIDS cases in teen-agers has increased by 40 percent in the last two years.

"We're talking about something that only a year ago was just a theoretical possibility," said Dr. Karen Hein, director of the adolescent AIDS program at Montefiore Medical Center in the Bronx.

Ann Northrop, an AIDS educator at the Hetrick-Martin Institute Inc. for Lesbian and Gay Youth in New York City, said, "We think it's a crisis emergency situation."

A wide variety of experts, including officials at the National Institutes of Health in Bethesda, Md., AIDS researchers at medical schools, social scientists and advocates who work with teen-agers say the nation needs to do a better job of teaching adolescents that they are at risk.

These experts also say teen-agers should also be taught how to use condoms and should have much greater access to health care services than they now have. And, they caution, time is running out. "We are truly fiddling while Rome burns," said Judith Senderowitz, executive director of the Center for Population Options in Washington, a nonprofit organization that focuses on adolescents.

The Centers for Disease Control in Atlanta estimates that 1 million to 1.5 million of the nation's 230 million people are infected with the AIDS virus, an infection rate of 4.3 to 6.5 per 1,000. And the rate could be much higher in some teen-age groups.

"Each of these studies is limited in scope, but enough data are accumulating from different sources that the patterns are becoming clear," said Dr. Michael E. St. Louis, an epidemiologist at the disease control centers. "There is something sobering about the data from these studies."

A recent national study of blood samples from hospital patients, conducted by the Centers for Disease Control, found that 1 percent of 15- and 16-year-olds in areas like New York and Miami, where the AIDS virus is prevalent, are already infected. Two to three times as many 21-year-olds as 15-year-olds are infected.

The study showed that even in sections of the country where the AIDS virus is rare, 3 in 1,000 15- and 16-year-olds were infected and that the rate in 21-year-olds was double to triple that of the 15- and 16-year-olds. The study excluded patients admitted for trauma or substance abuse, who are more likely to have AIDS virus infections.

A survey analyzed recently by the New York State Health Department of all births in the state since 1987 found that 1 in 1,000 babies born to 15-year-olds had antibodies to the AIDS virus, indicating that the baby's mother was infected. The study also found that that 1 in 100 babies born to 19-year-olds had antibodies to the virus.

The military and the Job Corps, which test every applicant for AIDS virus infection, report that about 3 in 1,000 teen-age applicants are infected. But the military data might understate the problem because many applicants who suspect they are infected are tested privately and do not apply if the test is positive.

Covenant House, which helps runaways and teen-agers living on the street, found that 7 percent of 1,800 surveyed had HIV infections. The Hetrick-Martin Institute for Lesbian and Gay Youth estimates that 10 to 15 percent of the street teen-agers it counsels have tested positive for the AIDS virus, but that the number who are infected is probably much higher because most teen-agers who are counseled have not been tested.

And some studies indicate that as many as 1 percent of teen-agers in cities like New York are already infected.

The Centers for Disease Control reports that 20 percent of the 85,844 adult males who have been diagnosed with AIDS are in their 20's and that 25 percent of the 10,146 adult females with AIDS are in their 20's. Since the average time between infection with HIV and development of AIDS is 10 years, most contracted the disease in adolescence.

Until recently, adolescents were largely ignored by AIDS experts. They saw that the number of AIDS cases among adolescents was low and did not focus on the problem, said Dr. Hein. In addition, she said, talk of teen-age promiscuity makes some educators uncomfortable. "Teens raise a lot of issues that are very difficult for a lot of people," she said. "People have tended to focus on little kids or adults where this does not seem so murky or difficult."

Teens Are Sexually Active

But, Dr. Hein and others said, teenagers are extremely sexually active, as the rates of sexually transmitted diseases among them indicate. The Center for Population Options reports that each year one of six teen-agers contracts a sexually transmitted disease. The group also reports that one of every six sexually active high school girls has had at least four different partners.

Dr. Hein said that when she started a special program for adolescents with AIDS two years ago, her colleagues joked that it was a clinic without patients. "They called it the Emperor's New Clothes Clinic," she said. But in the last four months, three of the teenagers at her clinic have died of AIDS and she is helping 20 who have HIV infections.

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"We're up to our ears" in HIV infections, said Joyce Hunter, director of social work services at the Hetrick Martin Institute. She said her group is counseling a 14-year-old boy with AIDS and that two teen-agers have died of AIDS, including a student who died two months after he graduated from the Harvey Milk High School, which the institute runs for homosexual teen-agers.

"About 10 to 15 percent of our population is HIV positive or in some stage of active illness," said Francine Shifrin, of the Hetrick-Martin Institute, who directs a program for street adolescents. Alarming as those figures are, Ms. Shifrin said, "this is just the kids who were tested." She explained that most of the young men who are street prostitutes have not been tested.

Ms. Shifrin said that she is also concerned about the men who hire young male prostitutes. Most of the clients "are straight," she said.

" They identify themselves as heterosexuals and are probably going home to their wives," Ms. Shifrin said, and added that many of the teen-age boys who sell sex on the streets have heterosexual relationships to cover up their homosexual inclinations.

Ms. Hunter said she was chilled recently when she saw a teen-ager infected with the AIDS virus get into a car with a man who had a car seat. She said to herself, "Now that man's going to go home to his wife."

Dr. Philip Pizzo, an AIDS expert who is the chief of pediatrics at the National Cancer Institute, said the high HIV infection rates in teen-age runaways bodes ill for the AIDS epidemic. "There are more than a million runaways who are making their living through sex," he said.

"Without doubt, a number of them will be reintegrated into society," Dr. Pizzo said. "Coupled with all that is the usual adolescent denial and the reality that many teen-agers have not measurably altered their sexual practices and that they are not using condoms. All this represents a very significant kettle that could smolder and boil."

Ms. Senderowitz added that teen-agers are especially prone to deny their risk of HIV infections because they seldom see someone their own age with AIDS. "Adolescents are a prime example of a group that does not look 10 years ahead," she said.

Experts say that adolescents need a different kind of AIDS education than they are now receiving, one that teaches them them to use condoms and that makes them aware that AIDS is a threat to them as well as gay men and intravenous drug users.

When teen-agers are infected, they need to be seen by adolescent medicine specialists attuned to their special emotional and medical needs, not pediatricians or doctors who usually treat adults, Dr. Hein stressed. Virtually no teen-agers are in clinical trials of the latest experimental AIDS drugs, and that too needs to change, Dr. Pizzo and other experts said.

Teen-agers who have become infected with the AIDS virus said that they were not concerned at the time they were infected and gave no thought to safe sex practices until it was too late.

W. David Kamens, a 19-year-old with AIDS, said he thinks he became infected when he was 15 and a member of the Washington School of Ballet dance company. He said he engaged in unsafe sex with people he did not know well. "I was looking very hard to find a group of people that I could feel good with," he said. "I turned to people who were 25, 27 years old. It was a real unhealthy situation. I really didn't know what I was doing."

Mr. Kamens said he remembers sitting in a high school classroom two years ago and hearing a doctor "talk at us about AIDS."

"I was like, 'This is real great but I don't have time for this. I have things to do. I have homework.' I thought I knew everything."

Eight months later he was diagnosed with AIDS.